Minutes of the
Board of Minerals and Environment Meeting
Matthew Environmental Education and Training Center
523 East Capitol Avenue
Pierre, South Dakota

January 17-18, 2007
10:00 a.m. CST

WEDNESDAY, JANUARY 17, 2007

CALL TO ORDER AND ROLL CALL: The meeting was called to order by Chairman Richard C. Sweetman. The roll was called and a quorum was present.

BOARD MEMBERS PRESENT: Richard Sweetman, Lee McCahren, Linda Hilde, Dennis Landguth, Bob Duxbury, Mike DeMersseman, and Chuck Monson.

BOARD MEMBERS ABSENT: Wilbert Blumhardt and Pat Healy.

OTHERS PRESENT: See attached attendance sheets.

APPROVAL OF MINUTES FROM NOVEMBER 16, 2006, MEETING: Motion by McCahren, seconded by Duxbury, to approve the minutes from the November 16, 2006, Board of Minerals and Environment meeting, as mailed. Motion carried.

OIL AND GAS CASE NO. 13-2006, LUFF EXPLORATION COMPANY: Lee McCahren, who had been appointed hearing chairman, reported that John Morrison, attorney for Luff Exploration Company, filed a Motion for Continuance until February 15, 2007.

Roxanne Giedd, Deputy Attorney General, had no objection to granting the continuance.

Motion by Duxbury, seconded by Monson, to continue the hearing on Case No. 13-2006, Luff Exploration Company, until February 15, 2007. Motion carried.

LEGISLATIVE UPDATE: Brian Gustafson, DENR Air Quality Program, provided the board with a copy of Senate Bill No. 7, an act to establish certain fees to provide for air quality permitting, inspecting, and compliance services to ethanol production plants. He gave a brief overview of the bill and answered questions from the board.

The board was also provided with a copy of Senate Bill No. 8, an act to regulate natural gas produced with water unless the gas is used for personal purposes.

UPDATE ON EPA'S NEW PARTICULATE MATTER STANDARDS: Brad Schultz provided a Powerpoint presentation informing the board of EPA's new particulate matter standards and the impacts on South Dakota.

New changes to the PM10 and PM2.5 standard became final on September 21, 2006 and were implemented on December 18, 2006. Agriculture organizations and environmental groups filed challenges. South Dakota is in attainment with the new changes to PM10 and PM2.5 standards, and is currently one of ten states that have all of its counties attaining the National Ambient Air Quality Standards.

EPA retained the 24-hour PM10 standard at the current concentration level. Currently all areas of the state are in compliance with this standard. Rapid City is the only area that had trouble meeting the standard.

EPA revoked the annual standard. None of the air monitoring sites in the state ever recorded levels that exceeded this standard so it had no impact on compliance.

EPA reduced the 24-hour PM2.5 standard from 65 to 35 micrograms per cubic meter which is about 46% reduction in concentration level. All areas of the state have concentration levels less then the new standard. The highest concentration in the state was recorded in Sioux Falls.

The annual standard was retained at the current concentration of 15 micrograms per cubic meter. All monitoring sites have concentrations below the annual standard. The counties with the highest concentration in the state are located on the eastern edge of the state.

The focus of the PM10 health-based standard are in urban or populated areas. No change was made to the level of the PM10 standard and DENR does not anticipate any new impacts to farming activities.

PM2.5 sized particulates are produced mainly from combustion type sources. Burning for land clearing is not a common practice in our state and impacts only a small number of acres each year.

Mr. Schultz noted that states must provide EPA with proposed PM2.5 county designations by November 2007. EPA will not make any new PM10 designations under this action. The Department will wait and see how the court challenges affect EPA's implementation of the standard before adopting the new rules.

Following his presentation, Mr. Schultz answered questions from the board.

PUBLIC HEARING TO CONSIDER POWERTECH URANIUM EXPLORATION APPLICATION: Lee McCahren, hearing chairman, opened the hearing at 1:00 p.m. CST.

The purpose of the hearing was to consider the permit application to conduct exploration for uranium from PowerTech (USA), Inc., Centennial, Colorado. The exploration area is located approximately 13 miles northwest of Edgemont, within Sections 21, 27, 28, 29, 32, 33 and 34; T6S-R1E and Sections 1, 3, 5, 10, 11, 12 and 15; T7S-R1E, Custer and Fall River Counties.

The operation will consist of drilling 155 exploration holes for uranium in the Lakota and Fall River Formations. Each exploration hole will be approximately 500 feet to 600 feet in depth. The holes will be logged radiometrically for uranium. A limited number of holes will be cored and assayed for uranium and vanadium. Two pump tests will be performed on two five well patterns that will be drilled and cased. Powertech will utilize the existing gravel roads for access to the exploration areas.

The permit would only authorize those exploratory activities identified in the permit application and does not authorize the commencement of uranium mining activities. If the company decides to proceed with uranium mining at a later date, a state mine permit application and additional public hearings will be required.

The department recommended conditional approval of the exploration permit.

Ms. Giedd distributed copies of SDCL 45-6D, the uranium exploration statute. The board has not considered a uranium exploration permit application since the statue was enacted in 1982.

The board members and parties introduced themselves.

Powertech (USA) Inc. was represented by Max Main, attorney from Belle Fourche.

The Department of Environment and Natural Resources was represented by Roxanne Giedd, Deputy Attorney General, Pierre.

The following interveners in opposition to the application appeared pro se: Charmaine White Face, Harold One Feather, Richard Fort, Janice (Badhorse) Larson, Sylvia Lambert, Clifford White Eyes, and Alice Fourhorns.

John Putnam, Dewey, intervener in favor of the application, appeared pro se.

Ms. Giedd stated that the department had no objection to allowing the parties to intervene.

Ms. Giedd noted that the department received letters of intervention from Lilia Adecer Cajilog, Bill Center, and Keith Anderson, who were not present at the hearing. After the deadline for filing intervention, the department received letters from Dr. Richard Elston, Clem Holy Eagle, and Jerry Wilson, who were also not present at the hearing.

Mr. Fort requested that the hearing be continued until after the in-situ mining rules are approved. Mr. Fort said it is not proper for the board to consider the exploration permit application until after the in-situ mining rules are approved.

Ms. Giedd stated that the in-situ mining rules have nothing to do with uranium exploration. She noted that department had no position regarding continuance of the hearing.

Mr. Main agreed that the in-situ mining rules have nothing to do with uranium exploration. He objected to continuing the hearing until after adoption of the in-situ mining rules.

Mr. McCahren stated that on January 16, 2007, he received, via certified mail, a letter from Charmaine White Face requesting a continuance of the hearing.

Motion by Hilde, seconded by Monson, to proceed with the hearing. Motion carried.

Mr. McCahren requested comments from the public prior to formally opening the hearing.

Mato Standing High, Rosebud, SD, offered comments in opposition to the application.

Mr. McCahren then opened the formal hearing.

Mr. Main, Ms. Giedd, Mr. Fort, and Ms. White Face offered opening statements.

Marc Macy, Pierre, SD, was administered the oath by Mr. McCahren and testified on behalf of the Department of Environment and Natural Resources (DENR).

Exhibits offered and admitted into the record for DENR:

Exhibit A – Paper copy of Mr. Macy's Powerpoint presentation
Exhibit B – Briefing document for the Board of Minerals and Environment regarding the Powertech (USA), Inc. uranium exploration permit application

Frank Lichnovsky, Hot Springs, SD, was administered the oath by Mr. McCahren and testified on behalf of Powertech (USA), Inc.

Exhibits offered and admitted into the record for Powertech (USA), Inc.:

Exhibit 1 – Resume of Frank Lichnovsky
Exhibit 2 – Map showing Dewey-Burdock area
Exhibit 3 – Section map showing Powertech's holdings in the Dewey-Burdock area (approximately 11,000 acres)
Exhibit 4 – Strat column showing formations in the western Black Hills
Exhibit 5 – Well from Dewey-Burdock area (formations)
Exhibit 6 – Formation of the uranium
Exhibit 7 – Map
Exhibit 8 – Map showing proposed location of drill holes
Exhibit 9 – Photograph of drill site in Wyoming
Exhibit 10 – Sample of Irrevocable Letter of Credit
Exhibit 11 – January 17, 2007, letter to Mike Cepak from Fall River County Commissioners
Exhibit 12 – January 12, 2007, letter to Fall River County commissioners from Richard F. Clement, Jr.

Charmaine White Face testified in opposition to the application.

Exhibits offered and accepted into the record by Charmaine White Face:

Exhibit F – Abolition of Treaty Making, March 3, 1871
Exhibit G – 1980 Supreme Court ruling, United States v. Sioux Nation of Indians, et al.

Harold One Feather testified in opposition to the application.

Exhibits offered and accepted into the record by Harold One Feather:

Exhibit C – January 16, 2007, letter to the Board of Minerals and Environment from Harold One Feather
Exhibit D – File folder containing information on uranium mining and Powertech Uranium Corporation obtained from the internet
Exhibit E – File folder containing Powertech Uranium Corporation's interim consolidated financial statements, September 30, 2006

Richard Fort requested that the board reconsider its decision regarding continuation of the hearing.

Mr. McCahren denied Mr. Fort's request.

Sylvia Lambert testified in opposition to the application.

John Putnam testified in favor of the application.

This concluded testimony. Mr. McCahren requested board action.

Mr. Sweetman read 45-6D-29, which states that the board may not deny a permit, except for one or more of the following reasons:

1) The application is incomplete or the surety has not been posted;
2) The applicant has not paid the required fee;
3) The adverse effects of the proposed uranium exploration operation on the historic, archaeologic, geologic, scientific, or recreational aspects of affected or surrounding land outweigh the benefits of the proposed uranium exploration operation;
4) The proposed uranium exploration operation will result in the loss or reduction of long-range productivity of watershed lands, public and domestic water wells, aquifer recharge areas, or significant agricultural areas; or
5) The proposed uranium exploration operation will adversely affect threatened or endangered wildlife indigenous to the area.

Board discussion took place.

Motion by Hilde, seconded by Monson, to approve a uranium exploration permit for Powertech (USA) Inc., with conditions. Motion carried.

Mr. McCahren thanked all of the participants and declared the hearing closed.

Chairman Sweetman declared the meeting in recess.

Max Main presented his proposed Findings of Fact, Conclusions of Law and Order. Mr. McCahren stated that the board would act on the Findings of Fact, Conclusions of Law, and Order the following day.

A court reporter was present for this hearing and a transcript of the proceedings may be obtained by contacting Capital Reporting Services, PO Box 903, Pierre, SD 57501; telephone number 605-224-7611.

The meeting was also recorded and copy of the recording may be obtained by contacting the Department of Environment and Natural Resources, 523 East Capitol Avenue, Pierre, SD 57501; telephone number 605-773-3886.

THURSDAY, JANUARY 18, 2007

CALL TO ORDER AND ROLL CALL: Chairman Sweetman called the meeting back to order at 9:00 a.m. CST. A quorum was present.

FINDINGS OF FACT, CONCLUSION OF LAW, AND ORDER IN THE MATER OF THE POWERTECH (USA) INC. URANIUM EXPLORATION PERMIT: Lee McCahren, hearing chairman, requested action on the proposed Findings of Fact, Conclusions of Law, and Order.

Roxanne Giedd stated that she had no objections.

Richard Fort stated that he had strong objections to Findings of Fact Nos. 14, 15, and 16. He requested the opportunity to submit his objections in writing.

Mr. McCahren asked whether Ms. Giedd and Mr. Main had objections to Mr. Fort submitting his objections in writing and addressing it at the next board meeting.

Mr. Main stated that although there is no administrative rule or statutory minimum time in which to allow comments regarding the Findings of Fact, Conclusions of Law, and Order, Powertech would like the board to adopt them today.

Mr. Sweetman stated that the findings are a reflection of the testimony that was given and Nos. 14, 15, and 16 reflect the testimony that was given.

Mr. Main stated that during his direct testimony, Marc Macy expressly addressed all of the factors in Nos. 14, 15, and 16.

Mr. Fort stated that he and Ms. White Face raised serious questions during the hearing, and those concerns should be made in writing before the board makes a decision on the Findings of Fact, Conclusions of Law, and Order. He noted that he does not agree with Mr. Main that the validity of these statements was adequately addressed during the hearing.

Ms. Giedd noted that raising questions is not presenting evidence. The board has to act on the evidence. SDCL 45-6D provides certain deadlines for when the board has to act on an application. According to 45-6D-28, the final decision on an application shall be made within 90 days of receipt. In the event of serious unforeseen circumstances or significant snow cover on the affected land that prevents on site inspection, the board may reasonably extend the maximum time sixty days. Ms. Giedd said she interprets this statute as directory, not mandatory despite the fact that the word "shall" is included because it gives the board time periods to act and there are due process considerations and other concerns the board has to take into account so she has no objections to extending this to allow the interveners to submit proposed objections. However, if they want to submit objections they can do that after the fact and it would be included in the file of the record. If they want to submit proposed alternative Findings of Fact and Conclusions of Law, that is a different document and a different procedure. So the board needs to decide which procedure to use. If the interveners want to preserve their record and file objections, they can do so.

Mr. Main said he had no objection to the interveners supplementing the testimony they gave during the hearing with additional comments and objections.

Mr. Fort said he would submit his objections to Nos. 14, 15, and 16 in writing at a later date.

Charmaine White Face stated that she had objections to the Findings of Fact and Conclusions of Law. She also objected to there not being a court reporter present during proceeding to adopt the Findings of Fact, Conclusions of Law, and Order because this is a continuation of the hearing from the previous day.

Mr. McCahren said this proceeding is not to consider evidence.

Ms. White Face said she would present her objections orally and will also submit the objections in writing because a court reporter should have been present to record the objections.

Ms. White Face presented her objections.

Objection 1 – In our presence during the hearing, written evidence was handed to the board and noted by the court reporter in the hearing record. However, in our presence, the board did not consider the evidence admitted as no person on the board read any of the exhibits submitted by Harold One Feather or Charmaine White Face before rendering a decision.

Objection 2 – Powertech's application was misleading by stating that a small excavated mud pit that will be approximately 12' X 5" X 10" (L, W, D) when in actuality, according to the witness for Powertech, the mud pit will be 6 feet to 10 feet in depth.

Objection 3 – Powertech's reclamation plan is incomplete as the question of historic, archeological, sacred, or burial sites was incompletely addressed by the state archeologist.

Objection 4 – The Department of Game, Fish and Parks only submitted restrictions on raptors. Other threatened or endangered species indigenous to this area such as the spotted leopard frog and the Dakota Skipper need to be considered.

Objection 5 – Although the state archeologist did not submit any written restrictions, his recommendations should be dismissed due to his lack of written or verbal testimony. Furthermore, other experts in archeological resources, historic sites, tribal historic, and cultural preservation should have been consulted due to the long-term Native American presence in this geographic area for which this application is generated.

Objection 6 – The question of legal title to land ownership has never been fully resolved in the land area under consideration. Any American laws relating to land title must find their foundation in the Constitution of the United States of America. The arguments raised regarding the March 3 Act of 1871 were completely disregarded by the Board.

Objection 7 – The Department's request to Powertech to obtain and provide water quality information is unethical and a conflict of interest. Powertech paid the individual who gathered the information which could lead to bias in the results. Although this might be the way things have always been done does not mean this process is ethical or without bias. When the public's interest is at hand, all activities must be as unbiased as possible.

An outside independent consultant, not associated with Powertech, needs to provide the water quality information. Furthermore, the old data according to the department, must be made available to the public as requested during the hearing and should also be used with the new data from an outside, independent consultant so that a true database of ground water quality can be ascertained. By utilizing a more open and transparent process, the onus of collusion, conspiracy, and subterfuge will be taken away from the department, the board, and the applicant.

Objection 8 – Again the question of an accurate, complete survey of historic and archaeological places in this area is raised. There is no way to financially pay for the reclamation of irreplaceable areas.

Objection 9 – Although the state archeologist did not submit any written restrictions, and especially as he was not present at the hearing, any reference to his recommendations should be dismissed. Furthermore, other experts in archeological resources, historic sites, tribal historic, and cultural preservation should have been consulted due to the long-term Native American presence in this geographic area for which this application is generated. Again, the question of

an accurate, complete survey of historic archaeological places in this area is raised. There is no way to financially pay for the reclamation of irreplaceable areas.

Objection 10 – A leak or break in any of the mud pits or holding ponds will result in the loss or reduction of long-range productivity of the surrounding watershed lands, public and domestic water wells, aquifer recharge areas, or significant agricultural areas, as the wastes held in the mud pits or holding ponds will contain not only the lixiviant but other minerals that were brought up in the process.

Objection 11 – The Department of Game, Fish and Parks only submitted restrictions on raptors. Other threatened or endangered species indigenous to this area such as the spotted leopard frog and the Dakota Skipper need to be considered. Any artesian springs coming from the affected aquifers also must be considered as there are species unique to the Cheyenne River which could be affected.

Mr. McCahren requested board action.

Motion by Sweetman, seconded by DeMerssemen, to adopt the Findings of Fact, Conclusions of Law, and Order. Motion carried.

PUBLIC HEARING TO CONSIDER ADOPTION OF REVISIONS TO 74:29:01:01 AND ADOPTION OF NEW CHAPTER 74:29:11, IN-SITU LEACH MINING RULES: Chairman Sweetman opened the public hearing at 9:15 a.m. CST.

The purpose of the hearing was to consider the adoption and amendment of proposed rules numbered 74:29:01:01 – Definitions and 74:29:11 – In situ leach mining.

Bob Townsend, administrator of the DENR Minerals and Mining Program, stated that when the department became aware that there was potential for uranium mining to go on again in the state about two years ago, the department reviewed all of the statutes, rules and regulations to see if there were any gaps. As a result of that review, the department determined that in the uranium exploration statutes there was the issue of bonding 10% of the exploration holes with a cap of $20,000 for statewide exploration for any given operator. The department's recommendation in S.B. 62 was to require 100% bonding.

S. B. 62 authorized the Board of Minerals and Environment to promulgate rules for the construction, operation, monitoring, and closure of uranium and other in-situ leach mines under the South Dakota Mined Land Reclamation Act (SDCL 45-6B). In response to this legislation, DENR developed draft rules, Chapter 74:29:11, In-Situ Leach Mining.

Mr. Townsend stated that in situ mining is already authorized under existing statute. If these rules are not adopted and the department receives a permit application for a uranium mining operation the department is still obligated to process that permit under the existing requirements.

The proposed rules include the requirements an applicant must meet to obtain a state mine permit for and to operate an in-situ leach mine. The rules will address facility design and construction, injection and recovery wells, mine operation, monitoring, reporting, waste disposal, aquifer restoration, well plugging, surface reclamation, and post-closure monitoring and maintenance.

Mr. Townsend noted that the proposed rules have changed substantially since the first draft was prepared due to a number of comments that were received.

Mike Cepak provided the board with a briefing document which includes the procedural checklist, the notice of preliminary draft in situ leach mining rules available for public review, the notice of hearing, written comments the department received as of January 16, 2007, Power Point slides, and the in situ leach mining rules question and answer sheet.

Mr. Cepak provided the board and audience with a copy of the proposed rules, which included changes made as a result of some of the comments the department received. He also handed out comments the department received late on January 17, 2006.

Mr. Cepak presented a Power Point presentation explaining in situ leach mining and summarizing the proposed amends and new rules as follows:

74:29:01:01 Definitions - revision and addition of definitions regarding in situ leach mining terminology

§§74:29:11:01 to 74:29:11:08, inclusive – requirements for in situ mine permit applications, including mine operations plan, reclamation plan, determination of ground water restoration demonstration, ground water restoration table, additional baseline information, and technical revisions;

§74:29:11:09 – requirements for the designation of exempted aquifers;

§§74:29:11:10 to 74:29:11:20, inclusive – requirements for wells, including well location and protection, well construction, monitoring wells, disposal of drill cuttings, mechanical integrity testing of wells, plugging drill holes, the repair, conversion and plugging of wells, corrective actions for improperly sealed wells, and authorizing new injection wells;

§§74:29:11:21 to 74:29:11:26, inclusive – requirements for the design and construction of mine facilities, including construction quality assurance plan, and the design and construction of ponds, surface impoundments, pipelines, recovery facilities, satellite facilities, and uranium byproduct material handling and disposal systems;

§§74:29:11:27 and 74:29:11:28 – requirements for waste disposal, including liquid and nonradioactive solid wastes;

§74:29:11:29 – injection volumes and pressure requirements;

§§74:29:11:30 to 74:29:11:33, inclusive – monitoring requirements, including water quality in production and nonproduction zones, and subsidence;

§§74:29:11:34 to 74:29:11:41, inclusive – excursion requirements, including confinement of recovery fluid, and the reporting, verifying, sampling and remedial actions for excursions;

§§74:29:11:42 to 74:29:11:45, inclusive – reporting and recording requirements, including well construction records, well plugging records, and maintenance and retention of records;

§§74:29:11:46 to 74:29:11:50, inclusive –ground water restoration requirements, including sampling procedures, progress reports, final restoration, and restoration parameters achieved and not achieved;

§§74:29:11:51 to 74:29:11:54, inclusive – closure requirements, including reclamation of surface facilities, radiation survey, and radiation standards for surface facilities; and

§§74:29:11:55 to 74:29:11:59, inclusive – postclosure requirements, including postclosure plan, estimated costs for postclosure care, general inspection and maintenance activities, operation of monitoring systems, postclosure ground water contamination, and end of the postclosure period.

Mr. Cepak noted that South Dakota does not have an EPA approved Underground Injection (UIC) program for Class III wells. South Dakota does have an approved Class II well program. He added that existing Chapter 74:55:01, Underground Injection Control – Class III Wells, will need to be repealed if the board approves new Chapter 74:29:11.

The notice of preliminary draft in situ leach mining rules available for public review was published on November 14, 2006, in the Hot Springs Star, and in the Pierre Capital Journal, Brookings Register, Rapid City Journal, Black Hills Pioneer, Custer County Chronicle, and Edgemont Herald Tribune on November 15, 2006. Notice was also mailed to the Minerals and Mining Program interested persons mailing list, the Board of Minerals and Environment mailing list, the Board of Water Management mailing list, and e-mailed to the Nuclear Regulatory Commission. The draft rules were posed on the DENR website on November 15, 2006.

Notice of the hearing was published in the Hot Springs Star on December 26, 2006, and in the Brookings Register, Pierre Capitol Journal, Black Hills Pioneer, and Custer County Chronicle on December 27, 2007. The notice was also sent to the Rapid City Journal, but they failed to publish the notice.

Notice of the hearing was mailed to the Board of Minerals and Mining interested persons mailing list, the Board of Minerals and Environment mailing list, the Board of Water Management mailing list, the Wyoming DEQ, and e-mailed to the Nuclear Regulatory Commission and the Environmental Protection Agency (EPA).

The deadline for written comments was January 17, 2007. Comments were received from the Legislative Research Council, the SD Geological Survey, the Department of Game, Fish and

Parks, Richard Sweetman, Powertech (USA) Inc., EPA, Shirley Frederick, the Nuclear Energy Commission, and Energy Metals Corporation US, Donna Fisher, Donald Pay and Nancy Hilding.

Chairman Sweetman requested general comments regarding the proposed rules.

Richard Fort, Lead, SD, expressed concern that since the final version of the rules was just provided at the start of this hearing, he did not have an adequate chance to review it. Mr. Fort stated that these rules are needed and he commended DENR for drafting the rules. He noted that in situ mining is really a water management process, so these rules should also be considered and approved by the Water Management Board. Mr. Fort also stated the there is a long list of possible things that can go wrong with in situ mining.

Sylvia Lambert, Interior, SD, expressed concern that the copy of the rules she received at the start of the hearing is not the same as the rules she received prior to the hearing.

Nancy Hilding, Black Hawk, SD, Prairie Hills Audobon Society, read the following:

1-26-4.7. New or additional hearings on proposed rules. The Interim Rules Review Committee may require an agency to revert to any step in the adoption procedure provided in § 1-26- 4. The Interim Rules Review Committee may require an agency to hold public hearings in addition to those provided for in § 1-26-4 if, in the judgment of the committee:

(1) The substance of the proposed rule has been significantly rewritten from the originally proposed rule which was not the result of testimony received from the public hearing.

Ms. Hilding stated that the proposed rules have been substantially rewritten and the public has not had the opportunity to comment on the changes, and this is a reason for her to go the Interim Rules Committee and ask them to send the rules back to the board for reconsideration.

Ms. Hilding also stated that SDCL 1-26-4 (6) states, "After the written comment period, the agency shall fully consider all written and oral submissions regarding the proposed rule. A proposed rule may be modified or amended at this time to include or exclude matters which were described in the notice of hearing." SDCL 1-26-4 (4) states "The agency shall afford all interested persons reasonable opportunity to submit data, opinions, or arguments, either orally or in writing, or both, at a hearing held for that purpose. The hearing may be continued from time to time until its business has been completed. The agency shall keep minutes of the hearing. A majority of the members of any board or commission authorized to pass rules must be present during the course of the hearing required by this subdivision."

Ms. Hilding said there is no way the board can consider all of the written and oral comments that are being submitted today. SDCL 1-26-4 (5) states "For a period of ten days after the hearing, the agency shall accept written comments regarding the proposed rule, unless the entity promulgating the rule is a part-time citizen board, commission, committee, task force, or other multiperson decision maker, in which case the record of written comments shall be closed at the

conclusion of the public hearing. However, the hearing may be specifically continued for the purpose of taking additional comments."

Ms. Hilding requested that the hearing be continued so the board can consider additional comments on the new version of the proposed rules. She also suggested that the board hold the hearing in the likely affected area, which is Hot Springs, SD. Ms. Hilding asked the board to consider holding all of its hearings via video conferencing.

Ms. Hilding also submitted written comments, which are listed with each section of the rules.

Shirley Frederick, Rapid City, SD, commented that the most important function of government is to protect our resources, in this case water. She stated that other parts of the world have had destructive results from ISL mining. Australia has had some bad experiences and Western Australia and the Navaho Nation have banned uranium mining. In addition to the possible ground water contamination, there is the issue of radioactive waste from mine sites. ISL mining not comparable to heap leach gold mining. Gold is a stable element. Uranium is a whole different thing – large unstable molecule that becomes mobile when dissolved in ISL solution. We know about radioactivity. What we don't know is when and where uranium will escape from the mine site into groundwater and cause irreparable harm. It is true that mining regulations have been tightened in recent years, but uranium mining is still an inherently dangerous business. Allowing ISL uranium mining is like giving a chemistry set to a child. No one knows exactly what will happen. Suppose there is an opening in the surrounding material allowing the uranium bearing solution to escape from the mine area and find its way into an aquifer. Suppose one of the recovery pipes gets clogged and injection solution continues to flow, where will the excess go. How long before the problem is discovered? How long to repair it? Can the damage be undone? Please remember that mining industry promises have not been kept in the past. Abandoned mines have not been cleaned up, and South Dakota residents are paying the price. If the board is truly concerned about the future of its citizens, it will recommend to the legislature a ban on further uranium mining in the state.

If the board chooses to proceed with rulemaking and invite the uranium miners in, the Water Management Board should have jurisdiction over water withdrawal, water management, and water quality issues. The state should require a bond that is big enough to protect South Dakotans from corporate misbehavior. It is way too easy for a corporation that is losing money to declare bankruptcy and walk away, leaving the taxpayers to clean up their mess. A large bond covering reclamation costs as you calculate them and a large contingency fund as well would help protect the state from cleanup liability. A history of each applicant should be considered. The state should learn from past experience that mining operations don't always go as planned and promulgate rules that provide long-term protection for our vital resources. This means detailed baseline data provided by the state, not the mining company, an extensive monitoring system, ongoing onsite verification of mining company data by the DENR, and harsh penalties for compliance failures. The wastewater from mining operations should be thoroughly cleaned to the World Health Organization's standard before being re-injected into the wells.

Ms. Frederick encouraged the board and DENR to make every effort to educate the public about ISL uranium mining. She stated that hearings should be held around the state, and particularly in the area that will be affected.

Ms. Frederick submitted her written comments to the board.

Charmaine White Face, Rapid City, SD, requested a continuance of the hearing because her written comments addressed the proposed rules that were given to her prior to the hearing, not the new proposed rules that were given to the board and the public at the start of the hearing. She requested a continuance in order to allow time to review the new proposed rules.

Ms. White Face also submitted written comments, which are listed with each section of the rules.

Gary Heckenliable, Action for the Environment, suggested that a historical perspective be taken. It seems that uranium mining is being taken in a casual way. He reminded the board what happened in the Brohm situation. A lot of people testified at that hearing regarding the potential damage of such a mine. The board approved the permit with a low bond. It is now a Superfund site that will be going on for the next hundreds of years that the taxpayers are going to be paying for. This type of uranium mining is even worse than that. It is dry in the west and we are allowing a company that we have no knowledge of whatsoever to drill above an aquifer that could destroy our precious water. He asked for more time to review the rules and make sure a huge bond is required of this company so if something horrible happens they are not allowed to just say here's the small bond, use it and go back to Canada. We need some assurances, especially after the Brohm situation, which was a catastrophe. Mr. Heckenliable said he believes this is another one in the making. He asked the board to give this careful consideration and not repeat the Brohm situation mistake again.

Nancy Hilding stated that she submitted a letter to the board from Prairie Hills Audubon Society pursuant to SDCL 1-26-7.1 requesting a statement of reasons if the board approves new mining rules for governing in situ uranium leach mining. A copy of the statement is to be served on the members of the Interim Rules Review Committee and the director of the Legislative Research Council.

Harold One Feather, Mobridge, SD, commented that there is a problem with public participation and notification. He questioned whether the department notified the tribes regarding this hearing. Secretary Pirner, at the State Tribal Relations Committee, said he did not want the state to fight with the tribe. S.B. 62 was being heard on the same day of the State Tribal Relations Committee and the tribes were not aware of it. Mr. One Feather said the people need to be notified. This mining company could decide to leave if something goes wrong. He stated that bonding is required for exploration but no bonding is required for the actual mining. The state is being pushed around trying to balance money and the protection of its people and we have to be prepared for the possibility of something going wrong with uranium mining.

Mr. One Feather also submitted written comments (same as Charmaine White Face), which are listed with each section of the rules.

Sylvia Lambert requested a continuance of the hearing to allow time to review the new proposed rules.

Nancy Hilding said SDCL 1-4-26 states, "Consultation with tribal government regarding state programs. It is the policy of the state to consult with a tribal government regarding the conduct of state government programs which have the potential of affecting tribal members on the reservation. This section may not be construed to confer any substantive rights on any party in any litigation or otherwise."

Ms. Hilding asked for clarification on who has jurisdiction over aquifers that are under reservation lands and other lands and how this will affect the jurisdiction or uranium mining on the reservations.

Chairman Sweetman said that is outside the scope of these rules.

Motion by McCarhen, seconded by Duxbury, to postpone the hearing for a month.

Dennis Landguth agreed that the hearing should be postponed so all of the comments can be considered.

Chuck Monson said the concerns and comments can be addressed today as the board goes through the rules, so there would be no benefit to postponing the hearing for a month.

Linda Hilde stated that the board should go through the rules today. After going through the rules, the board can decide whether or not they are prepared to make a decision today.

Mr. DeMersseman agreed that the board should hold the hearing today.

Mr. McCahren withdrew his motion. Mr. Duxbury withdrew his second.

Chairman Sweetman stated that the board would go through each section of the rules and hear public comments.

Richard E. Blubaugh, Powertech, submitted written comments in two parts. One part was comments specific to the content of the proposed in situ leach mining rules. The are listed specifically with each section. The other part was a comment document prepared by Thompson and Simmons, PLLC, Washington, D.C. The Thompson and Simmons comments were general in nature and were focused on the duplication of rules by South Dakota with those of the U.S. Nuclear Regulatory Commission (NRC) and the U.S. Environmental Protection Agency (EPA). Thompson and Simmons pointed out that NRC has required that all in situ leach uranium recovery facilities apply for and obtain an NRC license or appropriate license or permit from an NRC-approved Agreement State to recover uranium and to posses uranium source material. Powertech pointed out that South Dakota is not an NRC-approved Agreement State.

Powertech's Thompson and Simmons document also stated that the Safe Drinking Water Act (SDWA) of 1974 authorized the Underground Injection Control (UIC) program under EPA. The SDWA empowered EPA as the primary authority to regulate underground injection to protect current and future sources of drinking water. EPA was also authorized to provide states with the opportunity to assume primary authority over UIC programs. Powertech stated that South Dakota does not have primacy over an UIC program of mineral injection wells, also known as "Class III" wells. An in situ leach mine operator would need to get an aquifer exemption and a UIC permit from EPA.

Francis X. Cameron, Assistant General Counsel of Rulemaking and Fuel Cycle, U.S. Nuclear Regulatory Commission (NRC), submitted written comments stating that it appeared to NRC that South Dakota intended to assert regulatory authority over many activities associated with in situ leach mining, including uranium byproduct material, radiation standards for soil cleanup, and decommissioning radiation standards. The NRC was not clear on promulgating regulations that duplicate NRC requirements, and wondered if the State was attempting to take regulatory action in areas that are reserved exclusively to the NRC. NRC said that the State could inform its licensees of NRC requirements so long as the State adopts them in its own administrative procedures "solely for the purposes of notification, and does not exercise regulatory authority pursuant to them."

Donna Fisher, Deadwood, SD, submitted the following written comments:
There is no benefit of uranium mining for South Dakotans. We are giving away good quality ground water, a vital resource, to for-profit companies that, being corporations, have very limited liability and not interest in our health. Once contaminated, our ground water cannot be cleaned up. With limited surface water in western South Dakota, the availability of safe ground water is an enormous economic issue. Water, not uranium, is our most precious resource and strict rules must be written to protect our water. At Best, I urge the Board to delay all new uranium mining in South Dakota until the industry can produce conclusive scientific evidence that they can return all ground water in the mined area to its pre-mining quality. At minimum, I urge the Board to consider the economic and physical well-being of present and future South Dakotans and their neighbors by establishing stronger, strictest rules to protect ground water.

74:29:01:01. Definitions

(1) “Abandoned well”

No comments received.

(2) “Angle of repose”

No comments received.

(3) “Average commodity price”

No comments received

(4) "Background"

LRC wrote, in the first line add "s" to make "exist" plural.

Derric Iles wrote that the word "exist" should be changed to "exists."

The change suggested by LRC and Mr. Iles was made.

Powertech wrote that "Background" as related to radiation, should be identical to definition used by the US Nuclear Regulatory Commission (NRC).

(5) "Bankfull"

No comments received.

(6) "Baseline"

Sylvia Lambert and Nancy Hilding commented that this definition does not clarify who sets the specific value or guidelines.

No change was made to this definition as a result of the comments received.

(7) "Baseline well"

No comments received.

(8) "Becquerel"

No comments received.

(9) "Beneficial use"

Sylvia Lambert commented that social value should include burial and sacred sites.

Charmaine White Face said the definition of "social value" needs to be included in the rules.

No change was made to this rule as a result of the comments.

(10) "Best practicable technology"

No comments received.

(11) "Buffer"

No comment received

(12) "Byproduct material"

Richard Sweetman wrote that "byproduct material" should be defined as specifically for uranium or generically as waste resulting from in situ mining.

Powertech wrote that "byproduct material" should be identical to definition used by NRC.

As a result of these comments, this definition was revised to be more consistent with in situ rules and not the whole 74:29 mine reclamation. The definition was taken from 10 CFR 40.4.

(13) "Carrying capacity"

No comments received.

(14) "Casing"

No comments received.

(15) "Catastrophic collapse"

No comments received.

(16) "Cementing"

No comments received.

(17) "Class III well"

Douglas Minter, US EPA Region VIII, submitted written comments stating that (d) defines a "Class III Well" in part as "any well used in fossil fuel recovery, including oil shale and tar sands." This is inconsistent with the definition found in 40 CFR Part 144.81(15) and Part 146.5(e)(16), which define such injection wells as Class V.

Similarly, (e) defines a "Class III well" in part as "any well used in experimental technologies, such as pilot scale in situ leach mining in previously unmined areas." This is inconsistent with the definition found in 40 CFR Part 144.81(14) and Part 146.5(e)(15), which define such injection wells as Class V.

As a result of these comments (d) and (e) were stricken from this definition.

(18) "Class V well"

Douglas Minter, US EPA Region VIII, wrote that in making direct reference to the federal UIC program, this section defines a "Class V well" as "a well not used to inject hazardous or radioactive waste, other industrial and municipal waste, fluids for the enhanced recovery of oil or natural gas, or for the storage of hydrocarbons." Some of these activities (specifically, other industrial and municipal waste injected into or above the lowermost underground source of drinking water) are regulated by EPA as Class V wells. EPA recommended the following, more comprehensive and accurate wording consistent with 40 CFR Part 144.6(e) and 74:55:02:01(5): A "Class V well…a well not included in Class I, II, III, or IV. This includes a well not used to inject hazardous or radioactive waste, other industrial and municipal waste below the lowermost underground source of drinking water, fluids for the enhanced recovery of oil or natural gas, or for the storage of hydrocarbons."

Game, Fish and Parks wrote that "or" should be added after radioactive waste and after municipal waste.

This definition was changed as a result of Mr. Minter's comments.

(19) "Composite liner"

No comments received.

(20) "Concurrent reclamation"

No comments received.

(21) "Confining zone"

LRC wrote that in the second line the comma after the word "aquifers" should be deleted.

Ms. Lambert asked if "relatively impermeable" is defined.

Mr. Cepak stated that "relatively impermeable" it is not defined. He suggested striking "relatively."

Mr. Sweetman stated that nothing is impermeable.

Nancy Hilding requested continuing the hearing.

Mr. Cepak suggested striking "relatively impermeable." The board agreed.

Ms. Hilding disagreed with this change.

(22) "Contaminant"

Game, Fish and Parks wrote that adding the words “health or the health of animals or plants” supports protections found in 74:29:11:05 (Determination of groundwater restoration demonstration) and the definition of Toxic Pollutant found in 74:54:01:02.

This change was made to the definition.

Powertech wrote that the definition is overly broad, change “which is potentially” to “which has been shown to be harmful.”

Ms. Hilding requested that the hearing be continued.

(23) "Contiguous land"

No comments received.

(24) "Control parameter"

No comments received.

(25) "Critical habitat"

No comments received.

(26) “Curie”

No comments received.

(27) “Effluent”

This definition was updated by deleting “water discharged from a tailing impoundment” and adding “partially or completely treated or untreated liquid waste that is discharged”

(28) “Ephemeral stream”

No comments received.

(29) “Excursion”

Game, Fish and Parks wrote, delete “recovery”. As the rule is written, it is unclear if an injection well failure would be called an excursion. This change in definition will clarify that an injection or recovery well failure is an excursion, and will a production zone leak from improperly plugged drill hole.

Powertech wrote that while an excursion is an unwanted and undesirable movement of recovery fluid outside of the production zone, it is not necessarily an unauthorized action.

An excursion from the production zone has been contemplated by the rules, and indicated by the need for monitor wells and specified remedial action. Powertech suggests that the term “unauthorized” can and will be inflammatory to opponents of uranium development and should not be used lightly. If an excursion does not progress beyond the monitor well ring, Powertech recommends that it not be considered “unauthorized.”

The definition was not changed as a result of the comments received.

(30) “Exempted aquifer”

No comments received.

(31) “Facility”

No comments received.

(32) “Filing”

No comments received.

(33) “Final reclamation”

No comments received.

(34) “First operator”

No comments received.

(35) “Fluid”

No comments received.

(36) “Formation”

No comments received.

(37) "Formation fluid"

No comments received.

(38) “Geomembrane”

No comments received.

(39) "Geonet"

No comments received.

(40) "Geosynthetic clay liner"

No comments received.

(41) "Geotechnical analysis"

No comments received.

(42) "Grab sample"

No comments received.

(43) "Gray"

No comments received.

(44) "Ground water"

No comments received.

(45) "Ground water restoration"

Powertech wrote that the definition refers to successful restoration as when the quality of all ground water affected by the injection or mining is returned to restoration table values or better. This definition sets a standard that is excessively high and impossible to verify. The use of the word "all" can be interpreted to include ground water that may have been affected but does not lend itself to monitoring. The use of the restoration table values as "hard and fast" numerical standards does not allow for minor deviations from baseline for any parameter; and the use of the term "or better" infers the requirement to leave the ground water level even cleaner than it was at baseline. The net result is an unverifiable standard that cannot be achieved and is subject to various interpretations. Powertech suggested that the definition be revisited and that restoration be considered achieved when the quality of ground water in the production and nonproduction zones "is consistent with baseline conditions," as stated in section 74:29:11:39; alternatively, the language, "meets prior class of use" could be used. This would also be consistent with the language in Section 74:29:11:46, which states "….consistent with the values listed in the restoration table…"

As a result of Powertech's comments, the word "all" was deleted from the second line and the words "or better" were deleted at the end of the sentence.

Ms. Hilding disagreed with deleting “or better.”

(46) “Grout”

Richard Sweetman wrote, “Grout” is a generic term. By this definition you are limiting its meaning. Grout is a slurry of cement or bentonite, water and possibly other additives.

No change was made to this definition.

(47) “Hazardous waste”

No comments received.

(48) “Injection well”

No comments received.

(49) “Injection zone”

No comments received.

(50) “In situ leach mining”

No comments received.

(51) “Interim reclamation”

No comments received.

(52) “Intermittent stream”

No comments received.

(53) “Land application”

No comments received.

(54) “Life form”

No comments received.

(55) “Major modification”

Powertech wrote that “which has the potential to….” should replace “might.”

No change was made as a result of this comment.

(56) "Mechanical integrity"

No comments received.

(57) "Millsite"

No comments received.

(58) "Mineral reserve"

Powertech wrote suggesting changing this to "Mineral resource." The word "reserve" can trigger stock exchange reporting requirements.

No change was made as a result of this comment.

(59) "Mining solution"

No comments received.

(60) "Minor modification"

No comments received.

(61) "Monitor well"

No comments received.

(62) "Negative pressure gradient"

LRC wrote, in the fifth line insert a "0" before ".5".

Powertech wrote suggesting that the last sentence be deleted.

The two changes were made as suggested.

(63) "Nonproduction zone"

No comments received.

(64) "On/off load pad"

No comments received.

(65) “Operator” was stricken from the definitions because it is already defined in statute.

(65) “Pathway and fate analysis”

No comments received.

(66) “Perennial stream”

No comments received.

(67) “Permit amendment”

No comments received.

(68) “Permit application”

No comments received.

(69) “Permit area,”

No comments received.

(70) “Plugging”

No comments received.

(71) “Pore water”

No comments received.

(72) “Postmining land use”

No comments received.

(73) “Potential reserve”

Powertech wrote suggesting changing this to “Potential resource.” The word “reserve” can trigger stock exchange reporting requirements.

No change was made to this definition.

(74) “Pressure”

No comments received.

(75) “Process solution”

No comments received.

(76) “Production”

No comments received.

(77) “Production area”

No comments received.

(78) “Production well”

No comments received.

(79) “Production zone”

No comments received.

(80) “Proper stocking”

No comments received.

(81) “Rad”

No comments received.

(82) “Radioactive waste”

No comments received.

(83) “Receiving strata”

No comments received.

(84) “Reclaimed land surface”

No comments received.

(85) “Reclamation type”

No comments received.

(86) “Recovery fluid”

No comments received.

(87) “Reference area”

No comments received.

(88) “Rem”

No comments received.

(89) “Restored aquifer”

Powertech wrote, see comments for 45, Ground water restoration.

The words “or better” were stricken from the end of the sentence.

Ms. Hilding disagreed with this change.

Chairman Sweetman suggested adding “at least” before “restoration table values.” The board accepted that change.

(90) “Restoration table”

Powertech wrote suggesting deleting “restoration” prior to “values” and compliance goals for restoration…”consistent with baseline.”

This change was not made.

The department deleted the word “control” because that would be confused with monitoring for excursions.

(91) “Riparian zone”

No comments received.

(92) “Roentgen”

No comments received.

(93) “Satellite facility”

Powertech wrote suggesting that this may also be referred to as a “remote IX facility.”

The words “or ion exchange” were added before the word “facility” in the first line of the definition.

(94) “Sievert”

No comments received.

(95) “Slope”

No comments received.

(96) “Slope ratio”

No comments received.

(97) “Solid waste”

No comments received.

(98) “Spoil”

No comments received.

(99) “Stratum”

No comments received.

(100) “Submission”

No comments received.

(101) “Subsoil”

No comments received.

(102) “Successor operator”

No comments received.

(103) “Surface impoundment”

No comments received.

(104) “Tailings impoundment”

No comments received.

(105) "Technical revision"

No comments received.

(106) "Topsoil"

No comments received.

(107) "Treatment"

No comments received.

(108) "Treatment solution"

No comments received.

(109) "Unauthorized zone"

Powertech wrote that they consider this definition to be unnecessary and particularly inflammatory to opponents of uranium ISL mining. Powertech strongly urged the deletion of this definition because the definition for "Exempted aquifer" provides the definition of what constitutes the "authorized zone," consequently ground water outside of the exempted aquifer can be described by the less inflammatory "outside of the exempted aquifer."

This definition was not deleted from the rules.

(110) "Underground source of drinking water"

Ms. Hilding questioned why this definition does not apply to a one-home or one-ranch drinking water well. She objected to this definition and asked that it be explained to the Interim Rules Committee why a one-home or one-ranch drinking water well is not considered an underground source of drinking water.

This definition was not changed.

(111) "Upper limit value"

Powertech wrote suggesting inserting "One and one-half times…" at the beginning of this definition.

This definition was changed as a result of comments submitted by Derric Iles. This version of the definition was taken from Wyoming law and the old definitions in the UIC rules 74:54:01:01.

Ms. Hilding stated that she objected to this definition. Since the upper limit values are determined from the baseline sampling and agreed upon by the department and the operator after the permit has been issued, the public has no opportunity to comment on the values. She also requested that the hearing be continued.

Charmaine White Face also objected to this definition. She suggested that the words "and agreed upon by the department and the operator prior to initiation of mining." be stricken.

No further changes were made to this definition.

(112) "Vegetative type"

No comments received.

(113) "Verifying analysis"

No comments received.

(114) "Visual screening"

LRC wrote, in the third line delete the word "and" at the end of the line.
The word "and" was deleted at the end of the definition.

(115) "Visually and functionally compatible contours"

No comments received.

(116) "Well"

The word "and" was added to the end of this definition.

(117) "Yellowcake"

No comments received.

74:29:11:01 Application for in situ leach mine permit - Contents.

LRC wrote, in the second line replace the semicolon after "34A-2" with a comma. In (2)(d) in the second line insert the word "amended" after the word "as."

This change was made to the rules.

Energy Metals submitted a written comment that South Dakota does not have state primacy over the UIC Program for Class III injection wells, which results in dual

jurisdiction in most regulatory areas of in situ mining and creates the potential for variation and inconsistency in interpreting and administering regulatory programs. Energy Metals also expressed concerns regarding how bonding will be administered.

No change was made as a result of Energy Metals' comments.

Mr. Sweetman stated that board's position is that the state will adopt its rules and the primacy issue can be settled later.

Ms. Hilding suggested that in (g) "tribal" should be added after the word "state."

Ms. White Face stated that a spill that occurred in the 1980's polluted the aquifers of the Pine Ridge Reservation.

Ms. Hilding stated that this is another reason to continue the hearing.

Mr. Sweetman said the board is not required to address tribal rules and regulations.

Mr. McCahren stated that the board does not have jurisdiction or authority regarding tribal matters.

Ms. White Face commented that in (f) "or" should be changed to "and" or deleted.

Mr. Cepak stated that some of these in situ mines may not be for uranium, so the word "or" should be included in this section.

Ms. White Face also stated that since a U.S. Nuclear Regulatory Commission source material license is required, it is a major federal action, and therefore, requires an environmental impact statement or an environmental assessment.

Ms. Hilding said there is a state law that has been on the books for 30 or 40 years and has never been used because it says "may" not "shall" that allows the state to ask for an environmental impact statement.

Ken Milmine, Energy Metals, stated that if the application is for in situ uranium mining, the NRC will be involved and there will be an equivalent of an environmental impact statement prepared.

No change was made as a result of these comments.

74:29:11:02 Application content requirements - Additional baseline information required.

Powertech submitted written comments suggesting that in the last sentence of (2) inserting "…of the area underlying the…" or, alternatively, inserting "area" after "facilities."

This change was made to the rule.

Ms. White Face commented that another section must be included describing further public notifications in the event of an excursion or major systems failure as well as having the baseline studies available for public inspection.

A section must also be included describing the procedures involving discovery of cultural resources or notification of these discoveries.

Mr. Cepak stated that the state would provide public notification in the case of a violation. Excursions are normally reported to the state, the EPA, the NRC, etc. Baseline studies are available for public review.

Ms. Hilding commented that a section should be added requiring a biodiversity study of all wildlife, a baseline inventory of cultural sites, and a baseline survey of the scenic and geologic resources.

Mr. Cepak stated that these are covered under the Scenic and Unique Lands rules.

Mr. Townsend stated that 45-6B-92 states that the applicant shall, as part of the reclamation plan, include a description of all critical resources potentially affected by the mining operation and plans for mitigating potential impacts to such critical resources. Critical resources shall be addressed by the applicant during the evidentiary portion of a contested case hearing before the board on the mine permit application.

For purposes of this chapter, critical resources include the following:

(1) Wildlife-critical deer winter range, threatened or endangered species, and any other critical wildlife resource identified by the Department of Game, Fish and Parks;

(2) Aquatic resources-cold water fish life propagation water;

(3) Vegetation-riparian zones, mountain meadows, wetlands, and threatened or endangered species;

(4) Water-direct or indirect sources of drinking water;

(5) Visual resources-areas of severe visual constraint or retention quality objective;

(6) Soils-soils with high erosion and low revegetation potential;

(7) Cultural resources-cultural resources that are eligible for the national register of historic places;

(8) Air quality-areas with minimal ambient airborne particulates and areas near potential receptors including residences and recreational areas;

(9) Noise-areas near potential receptors including residences and recreational areas; and

(10) Lands designated as special, exceptional, critical, or unique pursuant to subdivision 45- 6B-33(3).

Ms. Hilding stated that this is baseline information the company has to provide, so why should the taxpayers have to go out and inventory the wildlife and the cultural aspects. A consultant should be hired to do this.

Mr. Sweetman said that is covered in other statutes.

Mr. Landguth said an environmental assessment should be done, which address most of these concerns.

Mr. Townsend said the department's position is that a comprehensive mine permit developed under the statute essentially is equal to an environmental assessment or and environmental impact statement. That is why the department has never required one.

No changes were made as a result of these comments.

Mr. Cepak noted that under General Authority "SDCL 34-21-15" was added and under Law Implemented "34-21-13" was deleted.

74:29:11:03 Application content requirements - Mine operations plan.

Powertech submitted written comments suggesting that in (2) using the term "proposed mining schedule" or other uses of the word "proposed" creates the potential for such lists and schedule to become permit requirements rather than what they truly are, which is an educated and engineered estimate that is subject to change as more empirical and operational data becomes available. Powertech is concerned that flexibility to react to possible changes in its knowledge base of the aquifer, ore body, economics, and potential unknowns will be lost if the proposed lists and schedules become fixed in permit conditions unless there is sufficient flexibility in the technical modifications.

These changes were made in (2) and in (2)(c).

Game, Fish and Parks wrote that (8)(i) should include the word "wildlife." This rule should include the opportunity for radiological monitoring of wildlife as a continuation from baseline monitoring required in 74:29:11:02(2) Application content requirements – Additional baseline information required.

This change was not made.

LRC wrote, for (20) in the second line delete the comma after the word “report.”

This change was made.

Ms. Hilding said that what is missing from all of the radiation enforcement is what happens to the cows and wildlife that eat and drink contaminated materials and water and how that concentrates through the food chain. Therefore, this section should include radiological monitoring on any animal that has at least eaten a contaminated material.

This change was not made.

Mr. Milmine stated that the reason stock and wildlife was not added to this section is because environmental monitoring of the water, air soils, and vegetations are the routes of exposure to stock and wildlife. So monitoring of those is adequate to determine any impacts to stock and wildlife.

Energy Metals commented on that the beginning of (23) should include the phrase “To the extent that existing information or data is available, a determination if existing water wells…”

This change was made.

Mr. Cepak noted that under General Authority “34-21-15” was added and under Law Implemented “34-21-13” was deleted.

Ms. White Face commented that in (8)(c)(i) to (iii) the laboratory must be totally independent from the applicant with no financial commitments or other liability or agreement with the applicant. It must also be certified by the state as being independent and must be selected by the state.

In (19) the spill contingency plan must also include public notification and measures to replace other water users’ sources of water for domestic and livestock consumption.

In (21) the impacts from ISL mining must also include public notification and provide for additional public impacts.

Mr. Fort expressed concern that a court reporter was not present at this hearing.

Mr. Sweetman noted that a court reporter is not usually present during rules hearings.

Ms. Hilding said the rules should include a section specifying that DENR will have oversight over the independence or quality of the labs doing the analyses. She again requested that the hearing be continued.

Mr. Sweetman stated that "laboratory" is defined in statute.

Ms. Hilding commented that these rules need to include a section on the transportation plan for the facility.

Mr. Cepak stated that is beyond the realm of these rules.

Regarding Ms. White Face's suggestion for an independent laboratory, Mr. Cepak said typically what happens at the gold mines is the operator collects the samples and it is sent to an independent lab.

Tim Tollefsrud stated that the issue with laboratories continually comes up with regard to whether or not the data collected by a permitted facility is reliable, whether or not we can insure that the environment is being protected because someone is maybe falsifying information, not collecting the samples appropriately, etc. DENR continually does not find that to be the case. The department conducts oversight inspections of those facilities and takes routine samples to verify the data that the company is collecting. In the very few cases where the department has found that data is not at an appropriate level, the department has actually taken criminal action against those people that have falsified the information.

Mr. Tollefsrud said the way DENR handles the laboratories and the data collected has worked in the past and it will be handled the same for a mining situation such as proposed under these rules.

No changes were made as a result of these comments.

74:29:11:04 Application content requirements - Reclamation plan.

Powertech wrote that for (1) the use of the phrase "…or better" is inappropriate and superfluous as used in this context. Demonstrating that the operation will achieve ground water restoration is the requirement. If one or more parameters are lower than baseline, then that is a fortuitous byproduct of successful ground water restoration. Also, the word "groundwater" should be changed to "ground water" to be consistent with the rest of the rules.

In (1)(b) change "proposed" to "estimated". In (1)(g), same as (1)(b), in (1)(j) Once ground water quality stability has been achieved, there should be no need for a five-year evaluation, and for (4), see comment for 74:29:11:02(2).

Powertech's proposed changes were made to (1)(b) and (1)(g).

In (1)(g) the department also added the word "and" at the end.

In (h) the department replaced “control parameters” with “restoration values.”

Game, Fish and Parks wrote that for (1)(i) consider adding “restored to the value for each parameter shown on the restoration table” to be consistent with ground water restoration requirements in 74:29:11:46 and ground water restoration definition in 74:29:01:01.

Energy Metals submitted written comments stating that (1)(i) and (j) are not necessary to provide an evaluation of the predicted ground water quality after restoration because the restoration will be to baseline.

The department deleted (1)(i) and (j) based on comments received from Energy Metals.

Mr. Fort objected to deleting these two sections.

In (4) the department deleted “proposed and added “estimated.”

Game, Fish and Parks wrote that in (11)(g) reclamation plan monitoring items and costs should consider cost associated with continuing baseline and operational monitoring requirements until a time reclamation is complete. Baseline and operational monitoring have provisions for radioactive materials testing occurring in important species, soil, air, and in surface and ground waters.

This change was not made.

Ms. White Face commented that a section must be included describing public notification and provide for additional public comments.

Mr. Townsend stated that the procedural statutes and rules cover public notice.

Mr. Cepak noted that in General Authority “34-21-15” was added.

74:29:11:05 Determination of ground water restoration demonstration.

Nancy Hilding suggested that this paragraph allows the department to consider seven factors in setting standards for ground water cleanup following leaching operations. Only factor (1) will provide the assurance necessary that an in situ operation will not become a ground water sacrifice area. Factors (2) through (7) will not provide added protection, but will be used to get around factor (1). In essence, the department is establishing what seems to be a stringent standard then allowing other factors to be considered that would essentially gut that standard. She suggested deleting (2) through (7).

Alternative suggestion: Provide that if using factors (2) through (7) are causes the table values to be modified in a manner to reduce baseline ground water quality beyond what would be allowed under factor (1), the operator would have to provide (a) a detailed cost/benefit analysis and (b) a detailed risk assessment justifying those values.

Mr. Cepak stated that based on these comments, (2) through (7) could be deleted. He also stated that the last paragraph was deleted from this section and moved to 74:29:11:06.

Powertech suggested that in the last paragraph, second line "pre-mining baseline condition or better" should be changed to "…condition consistent with the pre-mining baseline.

The provision allowing the operator to request the department to modify the water quality criteria used for ground water restoration would be an appropriate approach under a performance based regulation, however, the restriction to MCLs seems to be extremely burdensome and unnecessary for an exempted aquifer, or portion thereof, which will not be available as a source of drinking water. It would seem more appropriate and reasonable if the demonstration were directed at showing no harm to human health or the environment.

Ms. White Face stated that in (2) potential impacts to the health and well-being of the people, animals, wildlife, aquatic wildlife, and plant life must be defined to include negative effects such as cancer or other health problems associated with drinking potentially contaminated water.

In the last unnumbered section following (7) exceeding maximum contaminant levels must not be allowed unless the public is notified and allowed to suspend or cease proposed ISL mining operations until this inability to restore ground water quality to baseline measurements has been negotiated.

Mr. Townsend said eliminating (2) through (7) and adding the last paragraph to the next section will address this.

Mr. Milmine noted that this section reflects the State of Wyoming's rules.

Mr. Fort said this change opens the door to relaxing the water standards.

74:29:11:06 Ground water restoration table.

Powertech requested that the department consider using the restoration table as "hard and fast" numerical standards. Under a performance based regulatory approach, the restoration table values would be set as goals to strive for with the ultimate standard being to preclude harm to human health and the environment.

The department deleted "with control parameters" in the third line and added the following as a new paragraph.

"The restoration values shall be based on premining baseline conditions. If the ground water restoration demonstration in accordance with subdivision 74:29:11:04(1) indicates that the operation will be unable to achieve the standard of returning affected ground water

to baseline conditions with the application of best practicable technology, the department may set the restoration values as follows:

(1) To not exceed the applicable maximum contaminant levels in South Dakota ground water quality standards listed in 74:54:01:04;
(2) To not exceed the health advisory levels or secondary drinking water regulations set by the U.S. Environmental Protection Agency for other parameters not listed in Table 1 and Table 2 of 74:54:01:04; and
(3) To not exceed values based on an appropriate statistical method for any parameters not listed in South Dakota ground water quality standards, or in U.S. Environmental Protection Agency health advisory lists or secondary drinking water regulations.

Modification of the restoration table shall be done in accordance with 74:29:11:50."

Mr. Fort and Ms. Hilding asked for more time to study this change. Mr. Fort said this change opens the door to relaxing the water standards.

Mr. Cepak said this rule is comparable to the NRC because their goal is to get back to baseline.

Mr. Townsend said the point of the rules is to set the standards.

74:29:11:07 Establishment of baseline water quality in new mining areas.

Powertech wrote that the requirements to sample each and every well (production, injection, non-production, and monitoring) is simply excessive and unnecessarily costly. Powertech believes that a representative number of samples in any given mining area should be sufficient to establish baseline. The additional useful information might come from sampling every well would be vanishingly small. This provision appears to be data collection for the sake of collecting data.

(1) If values from only five or so wells is sufficient to determine the averages and ranges for baseline, why would it be necessary to sample every well? Who selects the designated wells and what criteria are used to make the selection?

(2) This requirement is one of high priority to Powertech. The last sentence of the second paragraph states that "All baseline wells shall be sampled at least once every two weeks for a minimum of six months prior to any mining activities." First, sampling all wells for baseline is excessive and sampling them at the specified frequency is even more excessive and is unnecessarily costly. Other states that regulate in situ leach mining are able to establish baseline with one to three samples from a representative number of wells. It is a well established fact that ground water moves quite slowly and, consequently, the water quality does not change significantly over the specified period of six months.

Second, it is not clear whether this provision applies to "All baseline wells…" or if it only applies to "Nonproduction zone baseline wells." This confusion is created by the placement of the requirement under (2) which addresses Nonproduction zone baseline.

Third, the statement that the "department shall consider baseline water quality values for a production area to determine the upper limit value of a control parameter…" begs the question of what criteria and/or methodology is used in this consideration.

Powertech suggested the department consider revising this requirement in the following manner:

- Requirements for production zone baseline, if different from nonproduction zone baseline, be addressed under (1) and requirements for nonproduction zone baseline be addressed under (2);
- Requirements covering both production zone baseline and nonproduction zone baseline be covered under a new item (3);
- The number of wells sampled should be based on what constitutes a representative number of wells under generally accepted methods for determining representative samples for a given number of wells;
- The sampling frequency should be reduced to one sample every two months for a minimum of six months. If a well shows results indicating a statistically significant variance for a control parameter, whether due to lab error or natural fluctuation, then additional samples would be required.

Energy Metals submitted written comments stating the baseline monitoring requirements for this section are extremely excessive. The company provided the following suggestions for changes to this section:

- Select a representative number of production zone monitor wells for the entire wellfield at a set spacing within the mining zone instead of requiring sampling for all injection and production wells. Data from all of these wells can then be used in determining restoration standards.
-
- The required parameters for baseline should be listed within the regulations or a reference provided. In addition, DENR should consider reducing the amount of sample rounds in which all parameters are analyzed for monitor wells outside of the mining zone and continue focus on parameters for upper control limits for all sample rounds.
-
- The method for calculating upper control limits should be described within the regulations.
-
- The baseline sampling frequency should be reduced from one sample every two weeks for 6 months (12 sample rounds) to one sample every two weeks for 4 sample rounds.

The department made several changes to this section based on comments from Powertech and Energy Metals.

Nancy Hilding wrote that sampling for all baseline water parameters should occur over a minimum of 1 year. Six months is not a sufficient baseline. She objected to the changes in this section.

74:29:11:08 Technical revisions to an in situ leach mine permit.

Powertech wrote commending the department for allowing the flexibility contained in this provision. This allows for greater efficiencies on the part of both the department and the operator. However, the language allowing interveners to petition for a contested case hearing could negate the reasonableness in this provision.

Nancy Hilding commented that these rules would provide for technical revisions to the permit. In past heap leach mining, the department used technical revisions, in place of permit amendments, to make fairly major changes in operations at mines out of the view of the public and without the public's ability to contest. Although groups we are familiar with never had the resources to challenge those technical revisions in court, it is our view that many of those technical revisions violated state law. The department needs to become far less secretive in these matters. Although typographical errors should be handled through the technical revision process, the department should not have the authority to make this up as it goes along.

Charmaine White Face commented that a subsection must be included to allow public notification of any technical amendments. In (3) modification of the lixiviants or other mine byproducts must have public notification and approval. If a major technical revision is necessary that substantially alters the form and the intent of the original application becomes necessary, the applicant must cease and suspend mining operations until these amendments have been properly addressed by the public.

Mr. Sweetman stated that Ms. White Face's last proposal is covered under the procedural requirements, 74:29:03.

No changes were made to this section as a result of public comments.

74:29:11:09 Designation of exempted aquifers.

Derric Iles wrote: The last sentence states "The board may exempt an underground source of drinking water from protection under this chapter and designate it as an exempted aquifer if it does not currently serve as a source of drinking water and if it cannot now and will not in the future serve as an underground source of drinking water for any of the following reasons:" Should we make this statement in terms of proximity to the mine site? For example, Inyan Kara Group sediments serve as a source of drinking water at many

locations in South Dakota, however, a water well on the north flank of the Black Hills has no possibility of being impacted by mining activities in Fall River County.

Richard Sweetman wrote, why the upper limit on dissolved solids?

Powertech wrote asking if the board has the authority to exempt an underground source of drinking water from protection under existing statutes? If not, are there potential legal ramifications to the implementation and enforcement of this section? Also, the use of the word "may" in the first sentence implies that the board "may not" exempt an aquifer. Powertech believes that this provision should be modified to indicate that, in the case of item (6) – approval as an exempted aquifer by the U.S. Environmental Protection Agency (EPA), the board "shall" or "will" exempt the aquifer, or portion thereof, exempted by the EPA. If this provision is not revised as suggested, an applicant could conceivably face the situation where EPA approves an aquifer exemption and the board does not. This situation would result in confusion, delays, and economic losses.

Charmaine White Face commented that preliminary research indicates that the aquifers above and below the proposed aquifers (Lakota and Fall River) to be mined for uranium have been used for both livestock and human consumption, therefore further public notification and comments must be required.

The department made changes to this section based on comments from SD Geological Survey.

Ms. Hilding and Mr. Fort objected to this section of the rules.

74:29:11:10 Injection wells subject to the provisions of this chapter.

Charmaine White Face commented that a section must be included to allow for EPA and NRC independent monitoring of the ISL mining operations.

Mr. Cepak said the state cannot mandate to the EPA or NRC to independently monitor the ISL mining operations.

No changes were made as a result of this comment.

74:29:11:11 Well location and protection.

No comments received.

74:29:11:12 Well construction requirements.

LRC wrote, in the fourth line replace "can supply" with "supplies."

Richard Sweetman wrote, "Sealing material shall consist of neat cement slurry or bentonite group…" "Slurry" is not defined. (d) refers to cement slurry, (i) refers to cement grout. Inconsistent.

Powertech wrote (1)(a) The commonly used drill bit yields a diameter of 8 7/8 inch hold. A six inch casing leaves 2 7/8 inches. Does this meet the requirement?

(1)(d)(i) A slurry weight of 15 lb/gal is excessively restrictive and unnecessarily costly. Based on the experience of Powertech personnel experienced with developing ISL wellfields, high sulfate resistant Portland cement is only required if the ground water is high in sulfate. Other states that regulate ISL mining allow a slurry density of 12 pounds per gallon cement. The lighter density reduces the amount of cement needed and reduces the collapse pressure on the casing.

Energy Metals commented that for (i) 15 lbs/gal for annular sealing may create a potential to exceed the collapse pressure for SDR 17 PVC casing in wells that are deeper than 500 feet, which is a typical casing material used in in situ mining in Wyoming and Nebraska. *The Manual of Water Well Construction Practices* published by the National Groundwater Association recommends cement for annual seals to be mixed no more than 7 gallons per 94-pound sack or approximately 13 lbs/gal. Energy Metals recommended that (i) be revised to reflect 13 lbs/gal.

Changes were made to this section based on the comments.

74:29:11:13 Well construction requirements – Injection wells.

Derric Iles submitted written comments stating that the last two sentences in this section mention "deviation checks." Diviation checks are not defined anywhere in this document.

The last two sentences in (1) were deleted from this section as a result of SD Geological Survey comments.

Powertech suggested in (2) deleting the term "unauthorized zones," and inserting "ground water outside the exempted aquifer."

No changes were made as a result of Powertech's comment.

Charmaine White Face commented that the well logs and associated analyses must be available for pubic inspection as well we being submitted to he US EPA and NRC for comment.

Mr. Townsend said the companies send the information to the department and it is open to the public unless it is marked confidential. There is a statute that allows mining companies mark geologic information as confidential if it poses a competitive disadvantage.

No changes were made as a result of Ms. White Face's comments.

74:29:11:14 Minimum requirements for monitor wells.

Ms. Hilding commented that in (1) crops, livestock, hunting animals, and fishing should be added.

No change was made to this section.

74:29:11:15 Disposal of drill cuttings.

Powertech wrote commending the department for allowing the opportunity to propose alternative drill cutting disposal methods.

Charmaine White Face commented that in subsection (5) radionuclide standards have been suggested without public notification or comment or approval.

She requested more time to study these rules.

No changes were made as a result of the comments. The only change made was under General Authority where "34-21-15" was added.

74:29:11:16 Mechanical integrity testing of injection wells.

Game, Fish and Parks wrote add the following, "As required by 74:29:11:35 the operator will give written notice to the department within 24 hours and initiate actions required by 74:29:11:35 any time a well lacks mechanical integrity." Also add, "Prior to injection at a new well the operator shall report to the department mechanical integrity testing results and other information used to determine absence of significant fluid movement into any unauthorized zone."

For (1)(c) Powertech wrote that it appreciates the opportunity to submit an alternative test to demonstrate mechanical integrity other than those prescribed.

Charmaine White Face commented that in subsection (5) the public must be notified of any cessation of mining operations as well as re-commencement of such mining operations.

Mr. Townsend stated that that is a procedural suggestion.

No changes were made as a result of the comments.

74:29:11:17 Supervision of well construction and testing.

Charmaine White Face commented that supervision must be independent of mining company and the State other than receiving licensing and certification.

No changes were made to this section.

74:29:11:18 Requirements for plugging drill holes and repair, conversion, and plugging wells.

Powertech wrote for (7)(b) This requirement is an unnecessary and redundant safety measure that has little, if any, affect on protecting human health and the environment. The location of a wellfield and the specific locations of the wells will have been recorded with at least two federal agencies as well as with the department. Powertech believes the numerous public records should suffice to ensure the locations of abandoned wells are adequately identified. However, if the department insists on a physical marker, Powertech suggests that a single marker be placed on the surface, on or near the center of a wellfield would be more effective than numerous markers below the surface.

Mr. Cepak stated that (7)(b) was changed based on Powertech's comments.

Ms. Hilding objected to this change. She said it is very important that all of these wells be clearly marked, not just the monitoring wells.

Mr. Milmine said this change will make the requirements the same as Wyoming's.

Mr. Sweetman suggested deleting the word "monitor."

Richard Blubaugh stated that in its comments Powertech did suggest an alternative single marker on the surface on or near the center of the wellfield.

Mr. DeMersseman said that in (7)(a) language needs to be adopted that ensures the location of the wells are recorded in the Register of Deeds office.

Mr. Townsend suggested that to give the company flexibility, the language in (7)(b) be changed to require the steel plate to be placed on top of the well with information as designated by the department.

The section was rewritten as follows: (b) The top of the plugging mixture in each abandoned well shall clearly show on a steel plate placed atop the sealing mixture the permit number, well identification number, and information required by the department. All marking devices shall be installed at a minimum depth of two feet below the land surface.

74:29:11:19 Corrective actions for improperly sealed wells.

Charmaine White Face commented that public notification must be included, as well as the possibility of the State suspending or terminating mining operations.

No changes were made.

74:29:11:20 Authorizing new injection wells within permit area boundary.

Nancy Hilding commented that these rules would provide for technical revisions to the permit. In past heap leach mining, the department used technical revisions, in place of permit amendments, to make fairly major changes in operations at mines out of the view of the public and without the public's ability to contest. Although groups we are familiar with never had the resources to challenge those technical revisions in court, it is our view that many of those technical revisions violated state law. The department needs to become far less secretive in these matters. Although typographical errors should be handled through the technical revision process, the department should not have the authority to make this up as it goes along.

Charmaine White Face commented that public notification must be included.

Mr. Fort commented that this is a serious modification of the already existing mine and to call that a technical revision is a stretch. It more properly should be subject to the requirements of an amendment.

Mr. Milmine said the application includes adequate description of the entire permit area and where the mineralized areas are. It also has a description of all the procedures of how you go about installing, operating, and restoring these areas.

Discussion took place among Mr. Fort, Ms. Hilding and Mr. Milmine regarding technical revisions.

Ms. Hilding objected to this section.

No changes were made as a result of these comments.

74:29:11:21 Design and construction of in situ leach mine surface facilities.

Charmaine White Face commented that public notification of any radon emissions must be included.

Ms. White Face stated that "reasonable achievable" is very subjective and she suggested something more substantive. The background level of radiation at the location of the facility should be determined first so they can be as close to background level as possible.

Nancy Hilding objected to the last paragraph of this section referring to airborne emissions as low as reasonable achievable.

Mr. Townsend said this in a NRC standard.

Rhonda Grantham, Crawford, NE, commented that the NRC regulates all of the radiation aspects of in situ mining. Companies are required to collect all of the baseline data for the water quality, soil, air, and radiological background quality, radon and other airborne regulations apply. In the mining process, companies have to maintain standards that are below the values set by regulatory limits.

Mr. Fort objected to the term "reasonable achievable."

The only change made in this section was "34-21-15" added under General Authority.

74:29:11:22 Construction quality assurance plan.

No comments received.

74:29:11:23 Pond and surface impoundment design and construction requirements.

Derric Iles wrote, in (3) (a), the exponent of "7" should not be allowed to be on a line separate from "10." In (3) (b), this requirements states "The soil liner shall have a one-foot compacted thickness placed in six-inch scarified and compacted lifts with no materials greater than three inches in diameter." This is probably a standard requirement for line construction, however it seems strange that we are requiring a compacted liner to be one foot in thickness yet it could really be just six inches thick if each of the lifts had a three inch chunk at the same location.

Ms. Hilding commented that a provision for the capacity of the pond relative to rainfall should be added to this section.

Ms. Grantham commented that pond construction is also regulated by the NRC.

The following was added as (1)(f) A minimum capacity of normal operating levels plus storage for 100-year, 24-hour storm event. The word "and" was deleted from the end of (d) and the word "and" was added to the end of (e).

74:29:11:24 Pipeline design and construction requirements.

Powertech wrote for (1)(a) This requirement is of concern and high priority for Powertech. The prescriptive specification of a double containment pipe with support centralizers is used in installations where hazardous to very hazardous liquids are being transported. The liquids involved in a uranium in situ leach mine will contain some uranium but is not highly toxic and will not present a significant risk to human health and the environment. The requirement for double containment pipe is unnecessary and redundant and is excessively costly. Powertech's initial cost comparison with piping requirements from other states regulating ISL mining indicated that the cost is two to three times more for the double containment pipe. Properly installed single walled pipe, operational monitoring,

and inspections should be more than adequate requirements for the protection of human health and the environment.

Energy Metals submitted comments that this Section requires "pipelines that have a flow greater than 25 gallons per minute, or contain recovery fluid or other fluids that have potential to pollute surface or groundwater, or pose a hazard to human health and the environment" to be constructed with double containment pipe with support centralizer to maintain annular spacing. This rule would require all recovery piping from the production wells, headerhouse main production lines, wellfield main production trunk lines, and the main production trunk line from the well field to the plant, to be constructed of double containment pipe. In addition, injection trunk lines from the headerhouse, wellfield, and to the plant would also need double containment piping since flow would be greater than 25 gallons per minute.

The labor costs to install double containment piping would also increase significantly since the double containment pipe would need to be constructed on site, including installation of centralizers, elbows, two welds per joint, and installation of collection systems.

However, certain areas within or near operational areas may pose more environmental risk, such as potential to contaminate a perennial stream or wetlands due to a discharge of mine fluids, or other areas of special environmental concern. For these areas special protective, mitigative, and response measures should be adequately described within the permit application.

Mr. Cepak stated that in (1) he changed "25 gallons per minute" to "250 gallons per minutes."

Mr. Cepak stated that most of the solution pipelines at the gold mines are in lined ditches, but there are other pipelines that are made of high density polyethylene pipe strung out on the ground to deliver solution from one site to another. Homestake recently constructed the Black Tail water treatment plant for the water that was draining out of Sawpit Gulch. A double piping system was used but that pipeline will be there for many years, so it was based on length of operation. Single-lined pipes are used at Brohm to transport solutions of acid mine drainage from the toe of the dump up to storage ponds.

Mr. Cepak stated that he would agree to deleting the double containment requirement in this section.

Mr. Fort and Ms. White Face objected to changing 25 gallons per minute to 250 gallons per minute.

Ms. Hilding objected to deleting the double containment requirement. She asked what happens if the facility discharges without a NPDES permit.

Mr. Cepak said that would be considered a spill.

Bill Markley, DENR Ground Water Quality Program, said if there is a spill at a mine site, the company has to clean it up to state standards. If there is a discharge of anything that would contaminate the surface or ground water, the company would have to clean it up to the state standards.

Mr. Milmine stated that he has only seen one pipeline failure and it was on a brand new line that was being pressure tested. The cost of a double containment pipeline would cost prohibitive.

Ms. Hilding she is concerned about the Cheyenne River and ground water being contaminated.

Mr. Sweetman declared the hearing in recess. He requested that interested persons draft suggested language for this section.

Mr. Fort requested that the hearing be continued until the next board meeting.

Mr. Sweetman stated that the hearing would resume.

Mr. Fort then asked that the board not make a decision until the next meeting in order to allow the board members time to consider all of the comments voiced during the hearing today.

Mr. Sweetman stated that if the board does make a decision on the rules whether it is today or next month, and the parties are not comfortable with the rules as they are adopted, they have the option of making a presentation to the Interim Rules Committee. The parties can also petition the board for new hearing on the rules at a later date.

Mr. Fort said he would like the opportunity to further study the rules.

Ms. White Face said she was under the impression that comments would be incorporated into the rules and following that the parties would have the opportunity to review and respond to the rules with the incorporated comments. She stated that she had to leave the hearing at this time. Ms. White Face requested that her comments be incorporated into the rules and that another draft be sent to everyone on the mailing list for review and consideration in a month.

Mr. Townsend stated that not every comment is being incorporated into the rules.

Mr. Townsend stated that before Ms. White Face left, he wanted to offer the following new section to address her concerns regarding public notice.

Public notice for in situ leach mines. The department will provide on its website quarterly updates on the operational status, compliance status, technical revisions submitted or approved, and other pertinent information regarding an active in situ leach mine permit.

Ms. Hilding and Ms. White Face asked that this information also be published in the newspapers because there are people that don't have computers. Ms. Hilding asked that a mailing list be created for people who want to receive this information.

Tim Tollefsrud stated that providing this information on the department's website is a reasonable way to get the information to people that want it.

The board accepted this new section, which will be placed at the end of the rules as **74:29:11:60.**

Mr. Cepak presented the changes to 74:29:11:24 which included deleting the double containment pipe requirement and replaced it with the requirement for early detection and shut down capability.

The board accepted the changes.

74:29:11:25 Recovery plant and satellite facility design and construction requirements.

No comments received.

74:29:11:26 Uranium byproduct material handling and disposal systems.

Roberta Fivecoate, DENR Minerals and Mining Program, said Charmaine White Face wrote: This section must be expanded to include the actual NRD regulations, including any future amendments by the US EPA and US NRC.

The only change in this section was under General Authority where "34-21-15" was added.

74:29:11:27 Disposal of liquid waste.

Nancy Hilding said that the board needs to reexamine the state's surface water quality standards.

No changes were made to this section.

74:29:11:28 Disposal of nonradioactive solid waste.

No comments received.

74:29:11:29 Prohibitions – Injection volumes and pressure.

Roberta Fivecoate said Charmaine White Face wrote: If injection volumes and pressures cause interference with drinking water and livestock uses, the mining operation must cease and suspend activities causing this problem and must only be allowed to continue only after public notification and approval is met.

No changes were made to this section.

74:29:11:30 Production area operational monitoring requirements.

Powertech wrote for (3) The requirements for a minimum of weekly monitoring of ground water quality is excessive and unnecessarily costly. The sampling frequency should be no more than monthly. Also, the wells to be sampled, unless there is a clear reason to otherwise, should only be the monitor wells, and this should be stated in this provision. Further, routine monitoring should be limited to the control parameters, not the full suite of parameters.

For (5) Powertech suggested that the monitor wells above and below the production zone area be monitored on the same, or less frequent schedule, than the monitor wells in the exempted aquifer.

Energy Metals submitted written comments for 74:29:11:30(3) stating that it is unclear which wells are required for the weekly monitoring of groundwater. EMC assumes that this requirement corresponds to the production zone monitor wells within the monitor well ring. If this is indeed the case, a sampling frequency of every two weeks of these wells is adequate to detect potential excursions rather than weekly sampling.

Based on comments from Powertech and Energy Metals, the department deleted (3) and renumbered the remainder of the section. In the new (4) monitoring requirements were changed from a minimum of every two weeks to a minimum of every month.

Roberta Fivecoate stated that Charmaine White Face wrote: If excursions have been detected, production wells must be converted to monitoring wells and all lixiviant injections must cease until water quality requirements have been met.

No change was made as a result of Ms. White Face's comment.

74:29:11:31 Production area monitor well location and spacing requirements.

Mr. Fort said he objected to this section. He said the result of this section is a totally inadequate monitoring system.

Mr. Milmine said the location of monitor wells has been studied by several people, including the NRC. The 400 feet is what NRC recommends as an average.

No changes were made to this section.

74:29:11:32 Nonproduction zone monitoring.

Derric Iles wrote that the first two sentences of the second paragraph state, "For the first overlying aquifer above the production zone, a minimum of one well for every one acre of production area shall be completed. For each additional overlying aquifer, a minimum of one well for every three acres of production area shall be completed." These requirements could result in many closely spaced monitor wells.

Energy Metals submitted comments stating that this section requires that nonproduction monitor wells "located within the production area and up to 200 feet outside the production area, with the majority of these wells located in the down gradient direction of ground water flow". The following paragraphs however do not clearly describe how monitor wells in the overlying and underlying aquifer are to be placed down gradient and up to 200 feet outside. There are simply a minimum number of wells per acre of production area. In addition, placing a majority of wells down gradient may cause a delay in detecting potential excursions from areas up gradient. For instance, many of the aquifers at the Smith Ranch-Highland Mine in Wyoming that could be impacted by in situ mining have a very small gradient and the velocity of groundwater is also very small (<10 feet per year). Underlying and overlying monitor wells should be spaced throughout the production area in order to provide quick detection of possible mining fluids.

This section also requires "nonproduction zone monitor wells shall be completed in any aquifer potentially affected by injection into the production zone. Migration of mining fluids from injection into the production zone would only be a potential for aquifers directly above and below the production zone. Therefore, that is where monitor wells should be placed. Any monitor wells placed in any additional overlying aquifers above the first overlying aquifer would be for detection of fluids from potentially leaking injection wells. Since there area already requirements in place for integrity testing, and requirements for investigation and potentially remediation in areas of wells that fail mechanical integrity, then placing additional wells in additional aquifers is a redundant exercise of monitoring. EMC recommends that the requirement for monitor wells in additional overlying aquifers above the first overlying aquifer be removed since adequate controls are already provided through well integrity testing, aquifer investigation and remediation controls already provided in these regulations.

However, the installation and monitoring of wells in additional overlying aquifers may be beneficial in situations where other domestic or stock wells are completed in aquifers near the production area. The regulations should reflect the flexibility for SD DENR to require additional overlying wells in those aquifers where wells of other uses are located.

No changes were made to this section.

74:29:11:33 Subsidence monitoring.

No comments received.

74:29:11:34 Confinement of recovery fluid.

Game, Fish and Parks wrote, in the title change "recovery" to "mining." This rule appears to be concerned with only recovery solutions while the intent is confinement of all mining solutions. In cases of fluid excursions and aquifer confinement the rules should not differentiate between injection and recovery fluids. By definition, mining solutions should describe all fluids used in in situ mining. Throughout the rules, please consider replacing "recovery" with "mining" to describe fluids used during in situ mining.

Powertech wrote suggesting that the first sentence be amended to read "…production zones that have been classified by the board or the U.S. Environmental Protection Agency…"

The term "designated production zone" is not included in the definitions. Is it the same as "production zone?"

In the last sentence, Powertech urged the omission of the term "…in an unauthorized zone" as it does not add anything to this provision.

Robert Fivecoate stated that Charmaine White Face wrote: All ISL mining operations must cease in addition to requirements established by the board.

Based on a comment from Powertech, the word "designated" was deleted in the third line.

74:29:11:35 Reporting excursions.

Powertech wrote that in the second sentence of this provision, Powertech strongly urges that the phrase "an unauthorized zone or" be omitted from this provision. The intent of this provision is clear without it. If the department believes that an additional descriptive term is necessary, Powertech suggested that the term "ground water outside of the exempted aquifer, or portion thereof," be considered as a substitute. This also applies to the use of the term "unauthorized zones" in the last sentence.

Charmaine White Face commented that public notification must be included.

Mr. Fort said the word "excursion" should not be used in these rules. He also stated that anytime an excursion takes place, the company should have to pay a penalty.

Ms. Hilding said the mine could be on state jurisdiction property and the impacts of the mine could be in ground water on tribal property. So there needs to be consultation with tribal entities about all of this, especially when dealing with excursions. The same goes for an excursion crossing from one state to another.

No changes were made to this section.

74:29:11:36 Verifying analysis.

Roberta Fivecoate state that Charmaine White Face wrote: The verifying analyses must also be approved by an independent laboratory as well as the UP EPA and US NRC.

No changes were made to this section.

74:29:11:37 Excursion sampling frequency.

Energy Metals submitted comments stating that the requirement of sampling two times a week during an excursion is excessive. Weekly sampling is adequate monitoring to meet the remedial action and excursion control requirements and time frames outlined in subsequent sections.

No changes were made to this section.

74:29:11:38 Remedial action for excursion.

Derric Iles wrote that in (5) the last sentence states, "A parameter may be excluded if the department determines a specific parameter is not likely to occur as a result of the in situ leach mine." I believe the department is actually concerned with the concentration or value of a particular parameter, not the mere presence of the parameter. The sentence should read, "A parameter may be excluded if the department determines that the concentration or value of a specific parameter is not likely to occur as a result of the in situ leach mine."

In the third sentence of the second to last paragraph states, "The first report period shall begin the day the presence of control parameter exceeding its upper value in a monitor well is verified." The word "a" should be inserted so that the sentence reads, "The first report period shall begin the day the presence of a control parameter…" I also have a question regarding "upper level value." An undesirable condition may result of the pH value is too low in addition to the pH value being too high. The last part of the sentence should be reworded to say, "…the verified presence of a control parameter in a monitor well at a concentrated or value not conforming to permit conditions."

Powertech wrote that in (5) the last sentence of the initial paragraph allows for the exclusion of "A parameter…" Powertech recommended that the provision be amended to allow for "one or more parameters" may be excluded.

Roberta Fivecoate stated that Charmaine White Face wrote: If it is demonstrated that the mining company cannot control excursions, all mining operations must cease.

Changes were made in (5) in response to comments received from Powertech and SD Geological Survey.

74:29:11:39 Excursions – Controlled.

Game, Fish and Parks wrote, in second line of the last paragraph, add "the value for each control parameter shown on the restoration table" after the word "restored." This is consistent with language found in 74:29:11:46, Ground water restoration requirements.

For the first paragraph, Powertech recommended the term "unauthorized areas" be deleted and that the more descriptive term "ground water outside of the exempted aquifer" be inserted in its place.

Powertech commended the department for including the standard stated as "…values consistent with local baseline water quality…" and recommended this standard, or one referring to "class of use" be used throughout this chapter.

Ms. Hilding commented that the final sentence of the last paragraph should be deleted.

Mr. Cepak noted that the department made changes in this section based on ground water flow. In the last paragraph, three consecutive "daily" samples was changed to three consecutive "weekly" samples and the words "for control parameters" were deleted.

Mr. Fort objected to these changes.

74:29:11:40 Excursions – Not controlled.

Derric Iles wrote that the first paragraph concludes with the words "unless the department determines a specific parameter is not likely to occur as a result of the in situ leach mine." I believe that what the department is really interested in is whether or not the concentration or value at which a specific parameter is observed is likely to be the result of an in situ leach mine.

Powertech wrote suggesting that, in the last line of the first paragraph, the term "or parameters" be inserted after the word "parameter" in order to clarify that the department may omit more than one parameter.

The following change was made in the second to last line of the first paragraph as a result of comments from the SD Geological Survey: Added "that the concentration or value of one or more" after the word "determines" and deleted "a specific." "parameter" was changed to "parameters."

74:29:11:41 Criteria for determination of adequacy of remedial action plan.

Powertech wrote suggesting that "unauthorized zones" be omitted and replaced with "ground water outside of the exempted aquifer."

No changes were made.

74:29:11:42 Reporting requirements.

Game, Fish and Parks wrote in (5)(c) add the following after "year", "a description of ground water restoration method used and an expected timeline to achieve ground water restoration method;"

Robert Fivecoate stated that Charmaine White Face wrote: The Operator and State must also be required to notify the public.

Based on comments from Game, Fish and Parks, (5)(c) was changed as follows: In the second line "and" was deleted, and ", a description of ground water restoration methods used, and an expected timeline to achieve ground water restoration" was added.

74:29:11:43 Well construction records.

Nancy Hilding said well construction records should be submitted sooner than within one year of construction, particularly is there is an excursion or another problem.

Mr. Cepak said this sections pertains to construction of the well. If there are problems they will have to report them sooner.

No changes were made to this section.

74:29:11:44 Well plugging records.

No comments received.

74:29:11:45 Maintenance and retention of records.

Derric Iles wrote that (3) states that "Calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation…" Recording data on strip charts may or may not be the method employed. Data may be more apt to be recorded and stored in digital form. The sentence should be changed to read, "Calibration and maintenance records and all original records of continuous monitoring instrumentation…"

Based on comments from Geological Survey, (3) was changed as follows: In the first line "records of" was added and "strip chart recordings for" was deleted. Under Law Implemented "34-21-26" was deleted.

Ms. Hilding commented that all records required to be kept by the operator should be open to the public. There should be a reading room established nearby the facility to house all records and make them available for viewing and copying.

Mr. Sweetman stated that the information placed on the internet should be adequate information.

Ms. Hilding also asked that a sentence be added requiring the operator to notify the department prior to discarding anything.

Mr. Townsend said the permit will specify what records the operator is required to provide to the state and the public can come to the department and review the records.

74:29:11:46 Ground water restoration requirements.

Powertech wrote stating that the term "authorized production area" is not defined. The use of "authorized is redundant and unnecessary, therefore should be deleted.

The use of the standard described as "levels consistent with the values listed in the restoration table" is commendable. However, language in the last sentence of this provision is inconsistent as it states, "…shall be restored to the value for each control parameter on the restoration table." Powertech suggested that the last sentence be deleted, or changed to be consistent with the previous sentence.

Energy Metals wrote that they feel SD DENR should consider requiring restoration to levels consistent with the values listed in the restoration table contained in the permit as the "primary goal" using best practicable technology and a standard of "Class of Use" after the adequate implementation of best practicable technology for restoration practices.

Based on comments from Powertech, in the first sentence "authorized" was deleted and the last sentence of the section was deleted.

74:29:11:47 Restoration sampling procedure.

Powertech wrote the requirement to sample all baseline wells is excessive and unnecessarily costly. The department and the operator should be able to cooperatively select the representative baseline wells that would provide sufficient data to determine compliance. Also, the requirement to sample the wells on a monthly basis for an undetermined period is excessive and unnecessarily costly. Powertech suggested the department consider changing this requirement to two consecutive months. And after filing the written report to the department, the sampling frequency be reduced to quarterly intervals.

Energy Metals commented that this Section requires sampling and analysis of "all baseline wells, and any other selected wells, for all control parameters listed in the restoration table

on a monthly basis". This entails an excessive amount of monitoring wells at an excessive cost.

In fact, during restoration, lixiviant injection is discontinued and the quality of the ground water is constantly being improved and typically under large bleed rates, thereby greatly diminishing the possibility and relative impact of an excursion. Therefore, the monitor ring wells, overlying aquifer wells, and underling aquifer wells should be sampled once every 60 days and analyzed for the excursion parameters and water levels only, unless a particular monitor well has been impacted from mining.

Additionally, requiring monthly sampling of the production zone wells is also excessive and costly. Quarterly sampling of these well for the parameters on the restoration table should be adequate to determine the effectiveness of restoration operations, establish adequate trends, and determine when restoration parameters are achieved.

Changes made based on comments from Powertech and Energy Metals included: in the third line added "designated", deleted "all", added "agreed upon by the department and the operator in the mine production area", deleted "control parameters", and in the last line added "bimonthly" and deleted "one month."

Mr. Fort and Ms. Hilding objected to these changes because more sampling should be required.

Mr. Milmine stated that in this case increasing the sampling would be useless because the water stays the same.

Mr. Cepak stated that once the water is restored, the sampling ensures that it stays restored, so it doesn't need to be done every day.

74:29:11:48 Restoration progress reports.

No comments received.

74:29:11:49 Final restoration – Restoration values achieved.

Powertech wrote that assuming the department is willing to revise the restoration sampling procedure as recommended above, Powertech recommends this provision be amended by requiring only three consecutive sample sets to show that ground water quality is consistent with the restoration values for control parameters. Also, Powertech is concerned about the lack of finality expressed in this provision. Powertech should not be required to continue monitoring if the department confirms aquifer restoration. The heading of this provision should accurately reflect the content.

Energy Metals wrote that this section could be combined with Section 74:29:11:47 and modified as described in the previous comment (comment for Section 74:29:11:47).

Additionally, once final restoration is acknowledged by the department, restoration monitoring should cease at that point rather than the option to request monitoring reduction through technical revision. Well plugging and site reclamation should commence after restoration approval.

No changes were made as the result of comments from Powertech and Energy Metals.

Mr. Cepak noted that the department made the following changes: In the catchline added "value" and deleted "parameters", in line two added "bimonthly", in line three added "on the restoration table" and deleted "for control parameters" and in line four, added "restoration" and deleted "control parameters."

74:29:11:50 Restoration values not achieved.

Powertech wrote that it appreciates the language of this provision as it allows for consideration of alternative restoration values under certain circumstances.

Roberta Fivecoate noted that Charmaine White Face wrote: If restoration parameters can not be achieved due to operator responsibility, the applicant's permit must be terminated.

Ms. Hilding commented she objects to this section. She said this paragraph provides an inappropriate loophole and should not be promulgated. Restoration parameters must be strictly adhered to.

For this section in the catchline "parameters" was deleted and "values" was added in its place. In the first line "value" was added and "parameters" was deleted. A new sentence was added at the end, "The alternative restoration shall conform to the requirements of 74:29:11:06."

74:29:11:51 Closure of mine site following restoration.

Powertech wrote that it believes that "closure" should be clearly defined in the definition section in a manner that clearly describes the point where the operator's responsibility for its ground water and surface disturbance impacts is determined to be ended.

Energy Metals wrote that due to the reduced state of the confined aquifer following restoration as described in Comment #4 (Section 74:29:11:04 (1)(i) and (j)), postclosure monitoring should not be required and therefore, all wells should be plugged and closure of the wellfield should begin as soon as reasonable after restoration achievement.

No changes were made to this section.

74:29:11:52 Reclamation of in situ leach mine surface facilities.

Derric Iles wrote that in (2) the last sentence states that "For impoundments that will be closed with the liner material left in place, the liner shall be constructed of materials that can prevent wastes from migrating into the liner during the active life of the facility." This issue has already been addressed by the construction requirements.

Based on comments received from Mr. Iles, the last sentence in (1) was deleted, the last sentence in (2) was deleted.

In response to a comment by Ms. Hilding the following was added: (3) "Radioactive waste shall be disposed of in accordance with a U.S. Nuclear Regulatory Commission Source Material License."

Under General Authority "32-21-15" was added.

74:29:11:53 Radiation survey of surface facilities at mine closure.

Game, Fish and Parks wrote, change "74:29:02(2)" to "74:29:11:02."

Powertech wrote that it believes this provision should be deferred to the U.S. Nuclear Regulatory Commission in the manner found at 74:29:11:52(1). If the department insists on regulating this function, then the provision should be identical to that of the NRC.

Robert Fivecoate noted that Charmaine White Face wrote: Public notification of the radiation survey must be included.

Energy Metals submitted comments that the NRC has regulations in place referring radiological surveys and standards for closure of surface facilities and soils. SD DENR should consider deferring to these regulations and eliminate there two sections.

In the first paragraph "74:29:02(2)" was deleted and "74:29:11:02(2)" was added in its place. Also, under General Authority "34-21-15" was added.

74:29:11:54 Radiation standards for closure of surface facilities.

Powertech wrote that it believes this provision also should be deferred to the NRC, or be identical to the NRC requirements.

Roberta Fivecoate stated that Charmaine White Face wrote: Radiation standards must be made public.

Energy Metals commented that the NRC has regulations in place veering radiological surveys and standards for closure of surface facilities and soils. SD DENR should consider deferring to these regulations and eliminate there two sections.

Nancy Hilding commented that this paragraph should be modified to state that the site will be released when background levels of radiation are demonstrated. There should be no levels allowed that are elevated above established background levels.

The only change in this section was adding "34-21-15" under General Authority.

74:29:11:55 Postclosure plan – Estimated costs for postclosure care.

Powertech wrote that this section is one of high priority for them. The reference to SDCL 45-6B-91 specifies a postclosure period of 30 years. Powertech believes this is overly burdensome and unnecessarily costly for a uranium in situ operation. Powertech is not aware of all of the facts and history behind the promulgation of SDCL 45-6B-91, but suspects that there were specific circumstances that resulted in restrictive requirements for a targeted industry that posed continuing environmental threats. However, if the department and the in situ operator are diligent in enforcing and complying with, respectively, the requirements of this proposed chapter, there should not be any continuing threats to human health and the environment once the department acknowledges successful closure. The 30-year postclosure period would simply be an unnecessary and extremely costly requirement.

If necessary, Powertech strongly recommends that the estimated postclosure costs be calculated over a period of not more than five years. If necessary, the department may, with board approval, require additional financial surety for each succeeding five-year period up to a maximum of thirty years.

In (1) delete the word "with" in the first sentence.

Energy Metals wrote: As stated in Comment #14 (Section 74:29:11:51), postclosure restoration monitoring should not be required.

The period of time for the postclosure period should be specifically defined. Accurate costs for post closure care cannot be estimated unless a specific time period is given. If reclamation and closure objectives have been attained at the end of the defined postclosure period, then reclamation liability and bonding for the operator should be released.

Mr. Cepak stated that postclosure periods under South Dakota mining law are mandated by 45-6B-91 and they can last up to a period of 30 years or more.

No changes were made to this section.

74:29:11:56 General postclosure inspection and maintenance activities.

Powertech wrote that the requirements described in this section appear to reflect the regulatory approach applied to Superfund or CERCLA sites. If the department has acknowledged that the operation has successfully met the requirements for closure, the site

should not present a continuing threat to human health and the environment. CERCLA sites have been determined to present such a threat. Therefore, Powertech respectfully requested that the department reconsider its approach to a postclosure period, if one has to be required at all.

Roberta Fivecoate stated that Charmaine White Face wrote: Public notification must be included.

Energy Metals wrote: As stated in Comment #14 (Section 74:29:11:51), postclosure restoration monitoring should not be required.

The period of time for the postclosure period should be specifically defined. Accurate costs for post closure care cannot be estimated unless a specific time period is given. If reclamation and closure objectives have been attained at the end of the defined postclosure period, then reclamation liability and bonding for the operator should be released.

No changes were made to this section.

74:29:11:57 Postclosure operation of monitoring systems.

LRC wrote, in the rule number replace “59” with “57.”

Powertech wrote that this provision is numbered incorrectly. It should be 74:29:57

Charmaine White Face commented that public notification must be included.

Energy Metals wrote: As stated in Comment #14 (Section 74:29:11:51), postclosure restoration monitoring should not be required.

The period of time for the postclosure period should be specifically defined. Accurate costs for post closure care cannot be estimated unless a specific time period is given. If reclamation and closure objectives have been attained at the end of the defined postclosure period, then reclamation liability and bonding for the operator should be released.

“57” was changed to “59” in the title of this section.

74:29:11:58 Ground water contamination during the postclosure period.

Roberta Fivecoate noted that Charmaine White Face wrote: Public notification must be included.

Energy Metals wrote: As stated in Comment #14 (Section 74:29:11:51), postclosure restoration monitoring should not be required.

The period of time for the postclosure period should be specifically defined. Accurate costs for post closure care cannot be estimated unless a specific time period is given. If reclamation and closure objectives have been attained at the end of the defined postclosure period, then reclamation liability and bonding for the operator should be released.

No changes were made to this section.

74:29:11:59 End of the postclosure period.

Powertech wrote that if it is necessary for there to be a post closure period, Powertech strongly urges the word "may" in the first sentence be changed to "shall," and the language in the second line to changed to "…water quality is consistent with the restoration values over (reasonable specified period)." Also, the operator should have the right to request the department to end the postclosure period after the first full year of stable ground water values that are consistent with the restoration table values.

Energy Metals wrote: As stated in Comment #14 (Section 74:29:11:51), postclosure restoration monitoring should not be required.

The period of time for the postclosure period should be specifically defined. Accurate costs for post closure care cannot be estimated unless a specific time period is given. If reclamation and closure objectives have been attained at the end of the defined postclosure period, then reclamation liability and bonding for the operator should be released.

Ms. Hilding commented that this paragraph creates a cumbersome process that would allow an operator to stall or deny the need for cleanup. This will set up a system by which an operator could legally escape responsibility for cleanup. There should be no need to establish fault by the operator, as the operator is accepting and fully documenting the condition of the land prior to operation, fully establishing background conditions, etc. If the operator is concerned that prior use of the land (eg., unplugged drill holes from previous exploration) might interfere with bringing the site back to background condition, it would be inappropriate for South Dakota to permit the operation. Further, the operator should have full control of the land furring operations, if for no other reason than security from terrorist attack. If the operator is unable to secure the land upon which is operation is occurring, then South Dakota should not permit the operation.

The only change made by the department in this section was in the first line, added "shall" and deleted the "s" after "end."

74:29:11:60. Public notice for in situ leach mines. The department will provide on its website quarterly updates on the operational status, compliance status, technical revisions submitted or approved, and other pertinent information regarding an active in situ leach mine permit.

Source:
General Authority: SDCL 34-21-12, 45-6B-81.

Law Implemented: SDCL 34-21-26, 45-6B-36, 45-6B-86.

Following the section by section review of the proposed rules, Chairman Sweetman requested board action.

Board discussion took place regarding the proposed rules with changes made during the hearing.

Motion by Monson, seconded by McCahren, that the board approve the rules as submitted with the changes made today, that the final document be made available of the DENR website, and requesting comments to the board at least 10 days prior to the next board meeting.

After board discussion regarding LRC requirements, Mr. Monson withdrew his motion and Mr. McCahren withdrew his second.

Mr. Sweetman requested board action.

Sylvia Lambert expressed concern that the board intended to adopt the rules today, rather than waiting until the next board meeting

Mr. Sweetman stated that all of the comments received regarding the rules will be included with the rules as part of the permanent record. Also, these rules will be reviewed by the Interim Rules Committee.

Ms. Hilding reminded the board that it is required to prepare a statement of reasons in accordance with 1-26-7.1.

Motion by Monson, seconded by McCahren, to adopt the amendments to 74:29:01:01 as presented, including changes during the hearing, and to adopt new rules 74:29:11, In situ Leach Mining as presented, including changes made during the hearing. Motion carried.

Chairman Sweetman thanked the participants and declared the hearing closed.

OTHER BUSINESS

The next Board of Minerals and Environment meeting is February 15, 2007, in the Matthew Training Center in Pierre.

ADJOURNMENT: Chairman Sweetman declared the meeting adjourned.

Linda Hilde 2-15-07
Secretary Date

Robert Duxbury 2-15-07
Witness Date

ATTENDANCE SHEET

BOARD OF MINERALS AND ENVIRONMENT MEETING

Location Matthew Training Center Pierre, SD

Date 1-17-07

NAME (PLEASE PRINT)	ADDRESS	REPRESENTING
Brad Schultz	Foss Building	DENR
Bria Gustafson	" "	DENR
Mary Jo Joens	Capitol	SPL.
Jarrod Johnson	Capitol	St Public Lands
Richard Clement	8910 Adams St NE Abq NM	Powertech
Richard Blubaugh	6200 S. Troy Cir, Centennial, CO	Powertech
Max Main	Belle Fourche	Powertech
Frank Lichnovsky	PO Box 90 Hot springs	Powertech
JOHN PUTNAM	778 CEDAR ST DEWEY SD	SELF
Stan Michals	3305 W. S. str R.C	GFP
Shirley Frederick	3411 Idlewild RC	self
RICHARD L. FORT	11307 BLACK FOREST ROAD LEAD 57754	SELF
Janice Larson	PO Box 24 Lower Brule SD 57548	
Alice Four Horns	St Francis SD	
Marcaine White Face	PO Box 2003 Rapid City, SD	Defenders of the Black Hills
Eric Holm	Pierre	DENR
Harold J. Oakfeather	Mobridge SD	Defenders of the Black Hills
Clifford White Eyes Sr	Rosebud S.D.	Defenders of Black Hills
Sylvia Lambert	P.O. Box 78, Interior, SD	self
Mary Standing High	Rosebud	self
Howard Goodhouse	P.O. Box 815 Pine Ridge SC	Oglala Sioux Tribe

ATTENDANCE SHEET

BOARD OF MINERALS AND ENVIRONMENT MEETING

Location Matthew Training Center
Pierre, SD

Date 1-17-07

NAME (PLEASE PRINT)	ADDRESS	REPRESENTING
Vincent Benigni Pleau	Pine Ridge	Sec - Defends BH
Rhonda Grantham	P.O Box 169 CRAWFORD, Nebr	
Marc Macy	Pierre SD	DENR
Gary Hoffenbacker	P.O. Box 422 RCSD 57709	ACJ
Roberta Fiveash	Pierre, SD	DENR
Larry Mann	520 4th RC, SD 57702 RC 5779	Powertech
Frances Linn	2040 W. Main Suit 307	SDPB
Deb Michaelson	PO Box 116	SD Peace & Justice
Duke Buchan	Pierre SD	SDGFP
Senator Frank Kloucek	29966 423 Ave Scotland SD 57059	H 19 Democrats
Mike Capek	Pierre, SD	DENR

ATTENDANCE SHEET

BOARD OF MINERALS AND ENVIRONMENT MEETING

Location Matthew Training Center
Pierre, SD

Date 1-18-07

NAME (PLEASE PRINT)	ADDRESS	REPRESENTING
Shirley Frederick	3411 Idlewild Ct	self
RICHARD L. FORT	11367 BLACK FOREST RD LEAD SD	ACT
Gary Heckenlaible	P.C. Box 422 RC SD 57709	ACT
Ken Milmine	~~Energ~~ 139 W. 2nd St., Suite 1C, Casper, WY 82601	Energy Metals Corporation
Roberta Fuerstate	Pierre, SD	DENR
Rhonda Grantham	PO Box 169 Crawford, NE	
Max Main	Belle Fourche	Powertech
Richard Clement	Albuquerque	Powertech
Frank Lichnovsky	Hot Springs	Powertech
Stan Michals	R.C.	GFP
Sheldon Haman	Pierre	DENR
Bill Harlan	The Rapid City Journal	
Sylvia Lambert	Interior SD	self
Bill Marty	Pierre, SD	DENR
Bob Mercer	Pierre	Newspaper
Mary Jo Jones	Pierre	SDC
Harold Montzka	Mobridge SD	Self
Harvard Goodman	Pine Ridge	Independent
Vincent Bear Eagle	Pine Ridge	Independent
Janice (Bullhorse) Larson	Lower Brule	Defenders of Bit

ATTENDANCE SHEET

BOARD OF MINERALS AND ENVIRONMENT MEETING

Location Matthew Training Center
Pierre, SD 57501

Date 1-18-07

NAME (PLEASE PRINT)	ADDRESS	REPRESENTING
Alicia FourHorns	St James	Defenders
Richard Blubaugh	10200 S. Troy Cir., Centennial, CO	Powertech
LAURA ROSS	2301 MINNEHAHA, MyPCS.	self
Charmaine White Face	PO Box 2003 Rapid City SD 57709	

SOUTH DAKOTA BOARD OF MINERALS AND ENVIRONMENT
RESOLUTION ADOPTING A STATEMENT OF REASONS
PREPARED PURSUANT TO SDCL 1-26-7.1

Whereas, Nancy Hilding, personally and on behalf of the Prairie Hills Audubon Society (PETITIONER), submitted a written request by letter dated January 17, 2007 for: ". . . a statement of reasons, if you approve new mining rules for governing in situ uranium leach mining" pursuant to SDCL 1-26-7.1; and

Whereas, all members of the South Dakota Board of Minerals and Environment (BOARD) have been furnished a copy of PETITIONER'S written request; and

Whereas, with respect to the meeting of the BOARD held today, February 15, 2007, that public notice of the meeting was provided pursuant to SDCL 1-25-1.1; and

Whereas, the BOARD has reviewed and carefully considered:

1. PETITIONER'S written request,
2. Requirements and procedures in SDCL 1-26-7.1, and
3. Comments, data, opinions, arguments, and reasons submitted by members of the public, BOARD, and staff of the DEPARTMENT relative to ARSD Chapter 74:29:11 and revisions to §74:29:01:01 adopted by the BOARD at its January 18, 2007 BOARD meeting; and

Whereas, the BOARD has reviewed and carefully considered the attached STATEMENT OF REASONS.

Now, therefore, be it RESOLVED that the BOARD by roll call vote adopts the attached STATEMENT OF REASONS in its entirety and the attached STATEMENT OF REASONS constitutes the BOARD'S "written concise statement of the principal reasons for and against the rule's adoption, incorporating therein its reasons for overruling the considerations urged against the rule's adoption or rejection" as required by SDCL 1-26-7.1.

Be it further RESOLVED that PETITIONER'S written request, the BOARD'S "STATEMENT OF REASONS", and this "RESOLUTION" be made a part of the minutes of this BOARD meeting and that in compliance with SDCL 1-26-7.1 the DEPARTMENT is authorized and directed to serve by mail a copy of the PETITIONER'S written request, BOARD'S "STATEMENT OF REASONS", and "RESOLUTION" on:

1. All members of the Interim Rules Review Committee,
2. Director of the Legislative Research Council, and
3. PETITIONER.

For the Board of Minerals and Environment:

Richard C Sweetman, Chairman — Date: Feb 15, 07

STATEMENT OF REASONS
FOR
ADOPTION OR REJECTION OF RULES
PURSUANT TO SDCL 1-26-7.1

Nancy Hilding, personally and on behalf of the Prairie Hills Audubon Society, submitted a written request to the Board of Minerals and Environment by letter dated January 17, 2007 for: ". . . a statement of reasons, if you approve new mining rules for governing in situ uranium leach mining" pursuant to SDCL 1-26-7.1 (EXHIBIT 1). This document was prepared in response to the request.

BACKGROUND

Increasing worldwide demand for uranium and a corresponding increase in the price of uranium has renewed interest in South Dakota's uranium resources, especially those that can be mined by in situ leach (ISL) mining methods. To prepare for the possibility of ISL mining operations moving into the state, the 2006 Legislature passed Senate Bill 62. Senate Bill 62 was designed to fill gaps in the state laws that govern uranium exploration and mining. This legislation authorized the Board of Minerals and Environment to promulgate rules for the construction, operation, monitoring, and closure of uranium and other ISL mines under the South Dakota Mined Land Reclamation Act (SDCL 45-6B).

While the rules adopted by the BOARD address all types of potential ISL mining, the immediate concern in South Dakota is ISL mining for uranium. ISL mining involves injecting solutions into an ore body through wells to leach the uranium out of the rock, then collecting the fluid through recovery wells and processing it on the surface to remove the uranium. In South Dakota the injection fluid would probably be native groundwater fortified with oxygen and carbon dioxide. Since the ore is left in place in the ground, there is little surface disturbance and no tailings or waste rock is generated as with a conventional mine.

During 2006 the DEPARTMENT developed a draft set of ISL mining rules. The DEPARTMENT made the draft rules available to the public for comment and provided public notice of their availability in November 2006. The public notice was published in seven newspapers across the state and mailed to 186 individuals and organizations, including Nancy Hilding, who had previously requested they be informed of pending actions of the Board. The DEPARTMENT made the draft rules available on its web site and mailed copies of the draft rules to individuals who requested them. No comments on the draft rules were received during this approximately 45-day review period.

The DEPARTMENT prepared and published a notice of hearing in late December 2006 relative to the proposed rules which again advised members of the public of the BOARD rule proposal, time and place of public hearing, and how comments, data, opinions, and arguments could be submitted to the BOARD relative to the proposed rules.

The proposed rules were served on the Department Secretary, the Legislative Research Council (LRC) and the Bureau of Finance and Management as required. LRC approved the rules for

legality and proposed style and form changes, which were made and adopted in the final set of rules.

The BOARD conducted the public hearing on the proposed rules on January 18, 2007 at which time the BOARD received considerable written and oral comments on the proposed rules. Many of the written comments had been received by the DEPARTMENT before the public hearing and were then provided to the BOARD.

During the public hearing the DEPARTMENT also offered the BOARD recommended modifications to the rules based on comments received from the public and style and form changes recommended by LRC.

During the public hearing the BOARD considered the information contained in written and oral comments on the proposed ISL mining rules and possible modifications. The BOARD then amended the draft rules and adopted the rules as amended.

Attached is a copy of the minutes of the public hearing conducted on January 18, 2007 (EXHIBIT 2). Starting on page 9 of the minutes is a summary of the oral and written comments received from the public which contain the principal reasons for and against the adoption of the proposed rules submitted by the public.

As part of the rule-making process the DEPARTMENT will present the rules adopted by the BOARD to the Interim Rules Review Committee (IRRC).

RESPONSE

PRINCIPAL REASONS

The principal reasons for the adoption of the ISL mining rules include:

Filling Regulatory Gaps

Prior to the adoption of these rules, ISL mining was already authorized under the existing state mining laws enacted in 1982 (SDCL 45-6B). However, there were no laws or rules that specifically address ISL mines. Senate Bill 62 and the new rules are designed to fill that gap by identifying the specific requirements an applicant must meet to obtain a permit for and to operate an ISL mine. The rules address in situ leach facility design and construction, injection and recovery well construction, mine operation, monitoring and reporting requirements, ground water remediation, waste disposal, aquifer restoration, well plugging, surface reclamation and post closure monitoring and maintenance.

Protection of Ground Water

Protection of ground water at an ISL mine is a primary concern. To this end, the rules include provisions for controlling the solutions injected into the ore zones to remove the target mineral, containing solutions within the ore zones to ensure no migration outside of production zones, monitoring injected solutions and ground water, mitigating ground water if solutions migrate out

of production zones, well construction and plugging and containing solutions and chemicals held in surface facilities.

Restoration of Ground Water

To further ensure ground water protection, once mining is complete within a portion of the ore zone, the rules require the operator to return the affected ground water back to baseline conditions. If this is not possible for specific chemical constituents, South Dakota ground water or secondary drinking water standards may be used.

Surface Reclamation

SDCL 45-6B-3 requires that upon depletion of the mineral resources the affected land is usable and productive to the extent possible for agricultural or recreational pursuits or future resource development. The rules include requirements for removal of buildings, roads and other surface facilities; re-vegetation; radiation cleanup standards for soils and waste disposal.

Postclosure Care

To ensure that ground water quality and the beneficial use of the reclaimed land is maintained, the adopted rules include postclosure provisions for long term care and maintenance of a reclaimed ISL mining site. The adopted rules require postclosure water quality monitoring and mitigation of mine impacted ground water.

OTHER CONSIDERATIONS

As indicated in the minutes of the public hearing (EXHIBIT 2), members of the public presented to the BOARD for its review and consideration a significant amount of oral and written comments and arguments in favor of and in opposition to the proposed ISL mining rules.

When requested to do so, SDCL 1-26-7.1 requires the BOARD to issue a written concise statement of the principal reasons for and against the adoption of rules. While the BOARD cannot speak for members of the public who submitted comments in the public hearing, the BOARD believes the minutes of the hearing contain the principal reasons for and against the adoption of the proposed rules. Rather than further summarize the information provided at the public hearing in that regard, the BOARD has created the following list of main considerations urged by the members of public concerning adoption of the ISL mining rules.

A. Environmental Impact Statement

Comments were made that there was no requirement in the rules for a State environmental impact statement (EIS). The rules do not include provisions for a State EIS for two reasons. First, existing state law (Chapter 34A-9) already addresses requirements for a State EIS. Second, a mine permit issued under existing state law already requires a detailed analysis of the potential impacts a mining operation may pose to the environment and natural resources that would only be duplicated by an EIS. It should be noted that ISL mines are also regulated by the federal Nuclear Regulatory Commission (NRC) and Environmental Protection Agency (EPA) and are subject to National Environmental Policy Act procedures that may involve the preparation of a federal environmental assessment or EIS.

B. Technical Revisions

A few commenters were critical of the rules allowing use of technical revisions to make changes to an ISL mine permit, stating that major changes can be made out of the view of the public, without public notice, and without the public's ability to contest. One commenter commended the use of technical revisions because of the flexibility they provide. Technical revisions are already allowed under existing rule § 74:29:03:16. Under the rule, the BOARD can delegate the authority to the DEPARTMENT to approve specific types of technical revisions through permit conditions. Technical revisions allow for minor modifications of a mine permit without the requirement of obtaining a permit amendment, which involves a lengthy administrative process. In accordance with § 74:29:03:16, technical revisions can be contested, and the DEPARTMENT is required to maintain a list of technical revisions that is readily available for public inspection. A copy of the list is provided to anyone upon request. The proposed rule on technical revisions was adopted by the BOARD as recommended.

C. Baseline and Operational Water Quality Monitoring Requirements

Some commenters stated that the baseline and operational water quality monitoring requirements were excessive and expensive. Other commenters asked that the baseline ground water monitoring period be increased from six months to a year, and monitoring requirements not be reduced. The DEPARTMENT reviewed the monitoring requirements and recommended several changes to the rules that would allow for adequate baseline and operational monitoring. Changes were made to §74:29:11:07, Establishment of baseline water quality in new mining areas, §74:29:11:30, Production area operational monitoring requirements, and §74:29:11:47, Restoration sampling procedure, which were adopted by the BOARD.

D. Ground Water Restoration

Several comments were received regarding ground water restoration. The DEPARTMENT reviewed and recommended changes to §74:29:11:05, Determination of ground water restoration demonstration, §74:29:11:06, Ground water restoration table , and §74:29:11:50, Restoration values not achieved. The changes were made to better define the requirements for restoration values, with the goal of having ground water restored to baseline conditions. In the event that baseline conditions can not be met for a specific chemical constituent, the rules allow for establishment of alternative restoration values based on South Dakota ground water standards, EPA health advisory standards, EPA secondary drinking water standards, or an appropriate statistical method for any parameter not listed in the standards. These modifications were adopted by the BOARD.

E. Aquifer Exemption

Several commenters objected to §74:29:11:09, Designation of exempted aquifers, opposing the idea that aquifers that meet the criteria of an underground source of drinking water could be exempted to allow ISL mining. The basis for the rule on aquifer exemptions is in the federal EPA Underground Injection Control (UIC) Class III Well rules, which do allow aquifer exemptions for ISL mining. This rule will be required if the state requests delegation of the UIC Class III Well program from EPA, so the BOARD adopted it as recommended.

F. Reclamation Bonding

Some commenters mentioned that the rules do not address reclamation bonding requirements. Reclamation and postclosure bonding requirements are already covered under the current mining

law, SDCL 45-6B, and therefore no rules are required. These bonds are calculated based on engineering estimates of what it would actually cost the State to hire a third party to carry out the reclamation and postclosure plans if for some reason the company fails to.

G. Public Notification

Commenters repeatedly asked for the rules to include public notification of spills, technical revisions, wells lacking mechanical integrity, corrective actions for improperly sealed wells, radioactive emissions from process facilities, uncontrolled movement of mining solutions into ground water outside of production zones, and postclosure plans. Based on these concerns, the BOARD adopted rule §74:29:11:60, Public notice for in situ leach mines, that requires the DEPARTMENT to provide on its website quarterly updates on the operational status, compliance status, technical revisions submitted or approved, and other pertinent information regarding an active ISL mine permit. It should be noted the permit files the DEPARTMENT maintains are already open to the public with the exception of a very limited amount of confidential information pertaining to geology and information that may affect the competitive position of the permittee as allowed by SDCL 45-6B-19.

H. Public Inspection of Records

There were some comments regarding the public's right to inspect records, including well logs. While the bulk of the information related to an in situ leach mine permit is available to the public, existing state law (SDCL 45-6B-19) allows geologic information such as well logs to be kept confidential. Due to this existing state law, no changes were made to the rules.

I. Double Wall Pipeline Requirement

Some commenters said the double wall pipeline requirements in draft rule §74:29:11:24, Pipeline design and construction requirements, were excessive and expensive. The double wall requirement was included in the draft rules to minimize the potential for pipeline spills. The State regulatory agency in Wyoming identified pipeline spills as one of the major issues it has had with ISL mines. The DEPARTMENT reviewed the double wall requirements, and based on its review of the comments and its experience with pipeline construction at gold mines in the Black Hills, it determined that the double wall requirement was excessive. The double wall requirement in the rule was replaced with a requirement for the installation of early detection and pipeline shut down capability based on pressure loss, which was adopted by the BOARD.

J. Tribal Consultation

One commenter was concerned that these rules only cover non-tribal lands and tribes should be notified of excursions of mining solutions into ground water outside production zones because it could impact ground water on tribal lands. As noted above, the BOARD adopted a rule requiring the DEPARTMENT to post quarterly reports on its web site, which will include information on ground water monitoring and compliance status. Considering the distances involved and ground water travel time, quarterly updates should be adequate notification, and special notification for any specific party in rule is not needed.

K. Postclosure Care and Maintenance

Some commenters stated that a lengthy postclosure period for ISL mines is not needed once ground water is restored. Existing state law (SDCL 45-6B-91) already requires a postclosure

period of 30 years. However, the 30-year period can be shortened by the BOARD if a reduced postclosure period ensures compliance with applicable performance standards. Therefore, the BOARD adopted the postclosure sections of the rule as recommended, with the exception of one style and form change.

L. Request to Continue Hearing

During the hearing, the DEPARTMENT provided the BOARD with all written comments it had received on the proposed rules prior to the hearing. The DEPARTMENT also provided its own recommended modifications to the proposed rules that were based on comments received from the public and style and form changes recommended by LRC. The Board decided to use the DEPARTMENT'S recommended modifications, which were incorporated into a set of the publicly noticed proposed rules, as the starting point to begin the hearing. Several commenters argued that the DEPARTMENT'S proposed modifications constituted a whole new set of proposed rules and therefore the hearing should be continued to allow the public to review them. The purpose of incorporating the DEPARTMENT'S recommended modifications into a set of the proposed rules rather than providing its own separate written recommendation as other parties to the hearing did, was to expedite what was anticipated to be a lengthy hearing.

M. Duplication of Federal Requirements

Several commenters, including the Nuclear Regulatory Commission (NRC), noted that some of the rules duplicate federal requirements for uranium byproduct material, radiation standards, underground injection control (UIC), and aquifer exemptions. South Dakota has not been delegated the authority to carry out federal UIC requirements for Class III wells by the Environmental Protection Agency (EPA), and is not an agreement state with the NRC. NRC asserted that the State cannot enforce rules in areas that are reserved exclusively to the NRC or federal government. However, the BOARD adopted the rules covering these subject areas for two reasons. First, if the state decides to pursue delegation of the UIC Class III Well program from EPA, it must already have rules in place equivalent to the federal rules. Second, the state has a vested interest in protecting its natural resources and the health and safety of its people and should have a say in how ISL mines conduct their operations.

N. Water Management Board Involvement

One commenter said the Water Management Board should be involved in this rule making process because ISL mining is essentially a water management issue. However, the 2006 Legislature clearly gave the Board of Minerals and Environment the authority to promulgate rules for ISL mining by passing Senate Bill 62. In addition, ISL mines will need to obtain a water right permit from the Water Management Board which will involve public notice and hearing. To issue a water right, the board has to consider whether water is available, if other rights will be affected, if the water will be used for a beneficial use and if it is in the public interest.

In summary, the BOARD rendered its decisions based on the evidence presented and is of the belief that the rules address appropriate environmental regulation of ISL mining operations in South Dakota. The BOARD deems the rules to be reasonable and necessary as a proper and legal exercise of its authority granted by the South Dakota Legislature.